10/520,378

(FILE 'HOME' ENTERED AT 12:27:23 ON 07 NOV 2005)

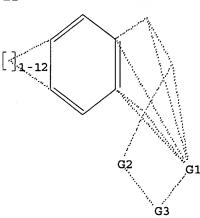
FILE 'REGISTRY' ENTERED AT 12:27:44 ON 07 NOV 2005 STRUCTURE UPLOADED

=> d l1

L1

L1 HAS NO ANSWERS

L1 ST



G1 Hf,Ti,Zr

G2 C, Si, Ge

G3 O, S, N, P

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:28:33 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 244 TO ITERATE

100.0% PROCESSED 244 ITERATIONS 7 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3943 TO 5817

PROJECTED ANSWERS:

IRS: 7 TO 298

L2 7 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 12:28:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4648 TO ITERATE

100.0% PROCESSED 4648 ITERATIONS 176 ANSWERS

SEARCH TIME: 00.00.01

L3 176 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 161.76 161.97

FILE 'CAPLUS' ENTERED AT 12:28:47 ON 07 NOV 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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```
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2005090427 A2 20050929 WO 2005-US8917 20050317

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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PRAI US 2004-553906P P 20040317

AB A composition comprises the admixt. or reaction product resulting from combining: (A) a first olefin polymerization catalyst, (B) a second olefin polymerization catalyst capable of preparing polymers differing in chemical or phys. properties from the polymer prepared by catalyst (A) under equivalent polymerization conditions, and (C) a chain shuttling agent. The composition may comprise a multi-block copolymer which contains two or more segments or blocks differing in chemical or phys. properties.

```
L4 ANSWER 2 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN AN 2005:668527 CAPLUS
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DN 143:326440

AU Irwin, Levi J.; Reibenspies, Joseph H.; Miller, Stephen A.

SO Polyhedron (2005), 24(11), 1314-1324

TI Synthesis and characterization of sterically expanded ansa-η1-fluorenyl-amido complexes

CS Department of Chemistry, Texas A&M University, College Station, TX, 77843-3255, USA

```
CODEN: PLYHDE; ISSN: 0277-5387
PB
     Elsevier B.V.
DT
     Journal
LA
     English
AΒ
     The octamethyl (octahydro) dibenzofluorenyl (Oct) ligand was incorporated
     into twelve ansa-Oct-amido complexes having the general structures
     Me2Si(\eta1-C29H36)(\eta1-N-tBu)MX2·L or Me2Si(\eta5-
     C29H36) (\eta 1-N-tBu)MX2 (M = Zr or Hf): 2 (X = Cl, L = Et20); 3 (X = Br,
     L = Et20); 4 (X = Me, L = Et20); 5 (X = Me, L = THF); 6 (X = CH2Ph); and 7
     (X = CH2SiMe3). The solid-state structures were determined for seven of these
     complexes by x-ray crystallog., revealing η5-C29H36 coordination for
     the ether-free, pseudotetrahedral species 6-Zr, 6-Hf, and 7-Zr, but
     η1-C29H36 coordination for the ether-bound, trigonal bipyramidal
     species 2-Zr, 3-Zr, 3-Hf, and 5-Zr. The unusual n1-C29H36
     coordination was assigned because only one metal-C bond in each structure
     was at 2.281-2.330 Å; a 2nd metal-C distance was found between 2.731
     and 2.847 Å; the remaining metal-C distances were found between 3.130
     and 4.029 Å. An increase in the hapticity of these and other Oct- and
     fluorenyl-containing compds. was correlated to a convergence in the C-C bond
     lengths within the relevant five-membered rings.
RE.CNT 60
              THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 3 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2004:534247 CAPLUS
DN
     141:89530
ΤI
     Olefin polymerization catalyst composition comprising group 13 amide
     derivatives
     Romer, Duane R.; Rosen, Robert K.; Stevens, James C.; Timmers, Francis J.;
IN
     Tuinstra, Hendrik E.
     Dow Global Technologies Inc., USA
PA
     PCT Int. Appl., 33 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                           APPLICATION NO.
                                DATE
                                                                  DATE
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                                -----
     WO 2004055067
                                20040701
PΙ
                         A1
                                            WO 2003-US36483
                                                                   20031117
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             CO, CR, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
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                                          CA 2003-2506144
                          AΑ
                                                                   20031117
     EP 1572757
                          A1
                                20050914
                                            EP 2003-768952
                                                                   20031117
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRAI US 2002-433180P
                         Р
                                20021213
     WO 2003-US36483
                          W
                                20031117
    MARPAT 141:89530
OS
     Catalyst compns. that are highly tolerant of catalyst poisons for use in
AB
     addition polymns. comprising a catalytic derivative of a Group 4 metal complex, a
     cocatalyst, and a Group 13 metal amide compound Thus, ethylene and 1-octene
     were polymerized in the presence of (N-tert-butylamido)(tetramethyl-η5-
     cyclopentadienyl) dimethylsilane titanium 1,3-pentadiene,
     tris(pentafluorophenyl)borane, and bis(ethylaluminum)-1-phenylene-2-
     (phenyl) amideo-μ-bisdiphenylamide.
RE.CNT
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
      4
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ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:308455 CAPLUS

DN 140:321926

```
Liquid and gel-like low molecular weight ethylene polymers
ΤI
    Karjala, Teresa; Yalvac, Selim; Karjala, Thomas; Vanderlende, Daniel D.;
IN
     Kolthammer, Brian W. S.; Stevens, James C.; Diehl, Charles F.
    Dow Global Technologies Inc., USA
PA
     PCT Int. Appl., 55 pp.
SO
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
                                          APPLICATION NO.
                                                                  DATE
    PATENT NO.
                        KIND
                               DATE
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                               ------
                               20040415 WO 2003-US30910
    WO 2004031250
                        A1
                                                                 20031001
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
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            UZ, YU, ZA, ZM, ZW
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            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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    EP 1554320
                         A1
                              20050720 EP 2003-799356
                                                                 20031001
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                              20021002
PRAI US 2002-415595P
                        P
                         Ρ
    US 2002-424880P
                               20021108
                         W
                               20031001
    WO 2003-US30910
    The subject invention pertains to homogeneous liquid low mol. weight
AB
    ethylene/alpha-olefin polymers having a number average mol. weight (Mn) as determined by
    gel permeation chromatog., of less than 25,000, a total crystallinity, as
    measured by DSC, of less than 10 %, and a pour point, as measured by ASTM
    D97, of less than 50°C. The subject invention also pertains to
    homogeneous gel-like low mol. weight ethylene/alpha-olefin polymers having a
    number average mol. weight (Mn) as determined by gel permeation chromatog., of less than
    25,000, a total crystallinity, as measured by DSC, of less than 50%, and a
    pour point, as measured by ASTM D97, of less than 90°C. These
    polymers having high comonomer concns., useful as pour-point-reducing
    additives for lubricating oils, are manufactured by polymerization of ethylene and
    ≥1 ethylenically unsatd. comonomer at ≥80° in the
     absence of H and in the presence of a single-site catalyst.
             THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 1
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 5 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
ΑN
    2004:120861 CAPLUS
DN
    140:164359
    Group 4 metal complexes containing 4-aryl-substituted, tricyclic indenyl
TI
    derivatives as olefin polymerization catalysts and catalyst manufacture
    Graf, David D.; Kuhlman, Roger L.
IN
PA
    Dow Global Technologies Inc., USA
    PCT Int. Appl., 28 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                 DATE
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                                         WO 2003-US16265
                               20040212
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                        A1
ΡI
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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            HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT,
            RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
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        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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CA 2003-2492952
                                                                  20030522
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                         AA
                                20040212
                                           EP 2003-729087
     EP 1529051
                               20050511
                                                                  20030522
                         Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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     BR 2003013087
                               20050628
                                           BR 2003-13087
                                                                  20030522
                         Α
PRAI US 2002-400489P
                         Р
                                20020802
     WO 2003-US16265
                         W
                                20030522
     MARPAT 140:164359
     Group 4 metal constrained geometry complexes comprise tricyclic 4-aryl
AB
     substituted indenyl liqands, especially 1,5,6,7-tetrahydro-4-aryl-s-indacen-1-yl
     ligands. The catalyst complex [N-(1,1-dimethylethyl)-1,1-dimethyl-
     (1,2,3,3a,8a-\eta)-1,5,6,7-tetrahydro-2-methyl-4-phenyl-s-indacen-1-
     yl]silanaminato(2-)-N titanium di-Me was prepared and used in ethylene
     polymerization with 1-octene.
     ANSWER 6 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
ΑN
     2003:376914 CAPLUS
DN
     138:385930
     Production of propylene copolymers using non-metallocene heteroaryl
TI
     ligand-containing metal-centered catalysts
IN
     Stevens, James C.; Vanderlende, Daniel D.
     The Dow Chemical Company, USA
PA
    PCT Int. Appl., 188 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 8
     PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                  DATE
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PΙ
    WO 2003040201
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                                          WO 2002-US14158
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            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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     EP 1444276
                         A1
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    US 6946535
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    US 2005245686
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                         A1
                               20051103
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PRAI US 2001-338881P
                         Р
                               20011106
    US 2002-378203P
                         Ρ
                               20020505
    US 2002-378204P
                         Р
                               20020505
    US 2002-380148P
                         Р
                               20020505
                       . M
    WO 2002-US14158
                               20020506
    US 2002-289122
                         A3
                               20021105
    US 2002-289138
                         A3
                               20021105
    US 2002-289145
                         A3
                               20021105
    US 2002-289168
                         A3
                               20021105
OS
    MARPAT 138:385930
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GI

Copolymers comprising propylene, ethylene and/or one or more unsatd. AB monomers are characterized as having at least one of the following properties: (a) 13C NMR peaks of about equal intensity corresponding to a regio-error at about 14.6 and about 15.7 ppm, (b) a B-value > 1.4 when the comonomer content of the copolymer is at least 3%, (c) a skewness index Six > -1.20, (d) a DSC curve with Tme that remains essentially the same and Tmax that decreases as the amount of comonomer in the copolymer increases, and (e) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta catalyst. These propylene polymers are produced using a non-metallocene, metal-centered, heteroaryl ligand-containing catalyst. polymers can be blended with other polymers, such as propylene copolymers produced with metallocene catalysts, or the blends can be produced in situ by polymerizing monomers in a series reactor process using a non-metallocene catalyst of the invention in a first reactor and a metallocene catalyst in a second reactor. The copolymers and blends can be used in manufacture of films, sheets, foams, fibers and molded articles. Thus, a non-metallocene heteroaryl ligand-containing hafnium-centered catalyst (I) was produced by reacting tetrakis (dimethylaminato) hafnium with 2-[(2,6diisopropylphenylamino)phenyl]methyl-6-(1-naphthyl)pyridine in pentane, followed by reacting the intermediate with trimethylaluminum in pentane/hexane. Isotactic ethylene-propylene copolymer was produced by continuous solution polymerization in toluene using the non-metallocene catalyst, bis(hydrogenated tallow alkyl)methylammonium tetrakis(pentafluorophenyl)bo rate and Me aluminoxane (PMAO-IP) as an activator.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

Ι

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ANSWER 7 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
     2002:964401 CAPLUS
DN
     138:25087
     Use of polar monomers as chain transfer agents in olefin polymerization
ΤI
     and production of long chain branching polymers
     Gaynor, Scott; Mullins, Michael; Athey, Phillip; Boone, Harold
IN
PA
     Dow Global Technologies Inc., USA
     PCT Int. Appl., 109 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                            WO 2002-US18459
     WO 2002100906
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                                20021219
                                                                    20020611
ΡI
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20030313
     US 2003050411
                          A1
                                           US 2002-167972
                                                                   20020611
PRAI US 2001-297642P
                                20010612
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A polymerization process comprises (1) contacting ≥1 polymerizable monomer, e.g., ethylene or propylene, in the presence of a polymerization catalyst, such as metallocene, non-metallocene or Ziegler-Natta catalyst, in a reactor, (2) effectuating polymerization of the monomer, (3) adding a polar monomer such as vinyl chloride to the reactor. The vinyl chloride monomer (VCM) behaves as a chain transfer agent undergoing β -Cl elimination after insertion in carbon-metal bond, and to produce long chain branching polymers. The polymers produced with VCM has better processability than those prepared in the absence of VCM, thus provide a cost effective process without substantially affecting the mol. weight of the polymers. In some polymers, the vinyl end groups can be transformed into other useful functional groups.

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 5 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN L4AN

2002:736295 CAPLUS

DN 137:263447

Preparation of polyolefins using high molecular weight and low molecular ΤI weight catalysts

IN Stevens, James C.; Vanderlende, Daniel D.

The Dow Chemical Company, USA PΑ so

PCT Int. Appl., 131 pp.

CODEN: PIXXD2

DT Patent

English LА

FAN.CNT 2

11111		rent :				KIN	D	DATE			API	PLI	CAT	ION :	NO.		D	ATE	
PI	WO	2002 2002	0748	17		A2		2002 2003	0926									0020	
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		2000	CY,	DE,	DK,	ES,	FI,	FR, CM,	GB,	GR,	IE	Ξ,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
	CA	2441	028			AA		2002											
	US	2003	0650					2003	0403		US	20	02-	1006	87		2	0020	315
		6875				B2		2005	0405										
	US	2003	0880					2003	0508		US	20	02-	1005	57		2	0020	315
	US	6924	342			B2		2005	0802										
	EΡ	1377	613			A2		2004	0107		ΕP	20	02-	7266	44		20	0020	315
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑI	Ĺ,	TR						
	BR	2002	0084	85		Α		2004	0309					8485				0020	315
	$^{\rm CN}$	1527	847			Α		2004	0908		CN	20	02-	8067	02		2	0020	315
	JΡ	2004	5276	12		T2		2004	0909		JΡ	20	02-	5738:	23		2	0020	315
	CN	1538	977			Α		2004			CN	20	02-	8066	96		20	0020	315
	ИО	2003	0040	79		Α		2003	1117		NO	20	03-	4079			20	0030	915
	US	2005	0207	78		A1		2005	0127		US	20	04-	9189	06		20	0040	816
	US	2005	0652	86		A1		2005	0324		US	20	04-	9204	85		20	0040	817
	US	2005	1873!	50		A1		2005	0825		US	20	05-	8539	0		20	0050	321
		2005187351				A1		2005			US	20	05-	8579	3		20	0050	321
PRAI		2001						2001											
		2002						2002	0315										
		2002						2002											
		2002	-			W		2002											
AB	Αŗ	olym	eriza	atio	n pro	oces	s co	mpri	ses o	cont	act	in	.g o	ne o	r mo	re o	lefiı	nic (comoi

contacting one or more the presence of at least a high mol. weight catalyst and at least a low mol. weight catalyst in a single reactor; and effectuating the polymerization of the olefinic comonomers in the reactor to obtain an olefin polymer. Preferably, both catalysts have the ability to incorporate a substantially similar amount of comonomers in the olefin polymer. The polymers produced by the process may have a relatively higher level of long chain branching

while maintaining a relatively narrow mol. weight distribution, i.e., MWD less than about 6. These interpolymers may exhibit processability similar to or better than LDPE but have phys. properties similar to metallocene catalyzed polymers. Thus, ethylene-1-octene copolymer was prepared using dimethylsilyl(tetramethylcyclopentadienyl)(tert-butylamido)titanium (1,3-pentadiene), armeenium borate [methylbis(hydrogenatedtallowalkyl)ammo nium tetrakis(pentafluoro phenyl)borate], MMAO-3A (alkyl Me aluminoxanes) in ISOPAR-E (isoalkanes).

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ANSWER 9 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
     2002:736294 CAPLUS
ΑN
DN
     137:248125
    High melt strength polyolefins and their manufacture
TI
    Degroot, Alexander W.; Stevens, James C.; Desjardins, Sylvie Y.; Weinhold,
IN
     Jeffrey; Carnahan, Edmund; Gillespie, David; Vanderlende, Daniel D.
     The Dow Chemical Company, USA; Dow Global Technologies Inc.
PA
     PCT Int. Appl., 103 pp.
SO
     CODEN: PIXXD2
DΤ
     Patent
     English
LA
FAN.CNT 2
                                         APPLICATION NO.
                       KIND DATE
                                                                 DATE
     PATENT NO.
                        ____
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                                          -----
     WO 2002074816
                        A2
                               20020926
                                         WO 2002-US7919
                                                                 20020315
ΡI
                               20040219
     WO 2002074816
                        Α3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
            GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
            GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2441262
                         AA
                               20020926
                                           CA 2002-2441262
                                                                  20020315
                                                                 20020315
                               20030403
                                           US 2002-100687
     US 2003065097
                         A1
                               20050405
     US 6875816
                        B2
                        A1
                                                                  20020315
                               20030508
                                          US 2002-100557
     US 2003088037
                        B2
     US 6924342
                               20050802
                                                                 20020315
                        Α
                                           BR 2002-8486
     BR 2002008486
                               20040309
                                           EP 2002-728477
                                                                 20020315
     EP 1412398
                         A2
                               20040428
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                           CN 2002-806702
                                                                  20020315
                         Α
                               20040908
     CN 1527847
                                           CN 2002-806696
                                                                 20020315
     CN 1538977
                         Α
                               20041020
                                                                 20020315
     JP 2004536895
                         T2
                               20041209
                                           JP 2002-573822
                       A
                                           NO 2003-4078
                                                                 20030915
     NO 2003004078
                               20031117
                        A1
                                                                 20040816
                                           US 2004-918906
     US 2005020778
                               20050127
                        A1
                                          US 2004-920485
                                                                20040817
     US 2005065286
                               20050324
                        A1
                                           US 2005-85390
                                                                20050321
     US 2005187350
                               20050825
     US 2005187351
                                          US 2005-85793
                                                                 20050321
                         A1
                               20050825
PRAI US 2001-276719P
                         P
                               20010316
     US 2002-100557
                         Α3
                               20020315
     US 2002-100687
                         A3
                               20020315
     WO 2002-US7919
                         W
                               20020315
     A polymer composition comprises (a) a high mol. weight, branched component and (b)
AB
     a low mol. weight, branched component. Some polymer compns. are
     characterized by a substantial absence of amyl or Me branches and a melt
     strength (MS) that satisfies the following relation, MS \geq x/I2 + y,
     where x .gtorsim.12.5 and y .gtorsim.3. Some polymers are characterized
     by a MS that satisfies the above relation, where x .gtorsim.3 and y
     .gtorsim.4.5 and have a mol. weight distribution >3. A polymerization process
     comprises contacting ≥1 olefinic comonomers in the presence of at
     least a high mol. weight catalyst and at least a low mol. weight catalyst in a
     single reactor. Thus, ethylene was polymerized with Armeenium borate and
     MMAO-3 cocatalyst, catalyst [(N-1,1-dimethylethyl)-1,1-(4-butylphenyl)-1-
```

[[1,2,3,3a,7a-n]-3-(1,3-dihydro-2H-isoindol-2-yl)-1H-inden-1-

yl]silanaminato-(2-)-N-]dimethyltitanium and rac-[1,2-ethanediylbis(1-

indenyl)]zirconium(1,4-diphenyl-11,3-butadiene) at ratio 0.34 at 140.3° to give polyethylene having d. 0.9638 g/mL and melt strength ~7 cN.

- L4ANSWER 10 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
- 2002:534055 CAPLUS AN
- DN137:109617
- Preparation of polyolefin with substituted indenyl transition metal ΤI complexes as catalysts
- Kale, Lawrence T.; Vanderlende, Daniel D.; Nickias, Peter N.; Patton, IN Jasson T.; Stevens, James C.; Parikh, Deepak R.; Mangold, Debra J.
- PA The Dow Chemical Company, USA
- U.S., 57 pp., Cont.-in-part of U.S. 5,965,756. SO

CODEN: USXXAM

- DT Patent
- LA English
- FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6420507	B1	20020716	US 1998-70957	19980501
	US 5965756	A	19991012	US 1997-949505	19971014
	ZA 9803672	Α	19991101	ZA 1998-3672	19980430
PRAI	US 1997-45348P	P	19970501		
	US 1997-45410P	P	19970501		
	US 1997-949505	A2	19971014		
	US 1996-34817P	P	19961219		
os	MARPAT 137:109617				

- GΙ For diagram(s), see printed CA Issue.
- Olefin polymers are produced by polymerizing ≥ 1 α -olefin at AΒ 75-170° with catalysts of group 4 complexes comprising an indenyl groups substituted in the 2 or 3 position with ≥1 groups selected from hydrocarbyl, perfluoro-substituted hydrocarbyl, silyl, germyl and mixts. thereof; said indenyl group further being covalently bonded to the metal via a divalent ligand group, wherein the divalent ligand comprises N or P having an aliphatic or alicyclic hydrocarbyl group covalently bonded thereto via a primary or secondary carbon. The catalyst also comprises an activating cocatalyst comprising trispentafluorophenyl-borane or a compound composed of pos. charged Bronsted acid and noncoordinating , compatible anion. Preferred olefin polymers of the invention will be characterized as having low d., high mol. weight, narrow mol. weight distribution, high vinyl content, a bimodal short chain branching distribution, and a bimodal DSC melting curve or a deconvoluted ATREF or GPC curve which shows at least two distinct narrow peaks. Thus, (2,3-Dimethylindenyl)(cyclododecylamido) silane reacted with n-BuLi in ether to give dilithium[(2,3dimethylindenyl) (cyclododecylamido) dimethyl-silane], which reacted with TiCl3 in THF to give (2,3-Dimethylindenyl)dimethyl(cyclododecylamido)silan etitanium dichloride.
- RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4ANSWER 11 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
- AN2002:142802 CAPLUS
- DN 136:201027
- Dimensionally stable foam made from compatibilized blends of poly(vinyl aromatic) polymers and poly(alpha-olefin)s for cushion packaging applications
- IN Chaudhary, Bharat I.; Hood, Lawrence S.; Barry, Russell P.
- PA The Dow Chemical Company, USA
- SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 2002014424	A2	20020221	WO 2001-US25438	20010814
	WO 2002014424	A3	20030710		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,

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HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU,
             ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001081270
                         A5
                              20020225
                                            AU 2001-81270
                                                                    20010814
                                20020815
                                            US 2001-929781
     US 2002111389
                         A1
                                                                    20010814
PRAI US 2000-225111P
                         P
                                20000814
                        W
     WO 2001-US25438
                                20010814
AB
     Foams made from a ternary blend of an alkenyl aromatic polymer such as
     polystyrene, an \alpha-olefin polymer such as polyethylene, and a
     substantially random interpolymer compatibilizer, are used as cushion
     packaging. The cushion packaging foams are soft, dimensionally stable,
     and exhibit good cushioning properties. Metallocene catalyzed ethylene
     styrene copolymer was used as a compatibilizer in blends with polystyrene
     and LDPE (20:20:60) and blown with isobutane to give a foam having d. 70.2
     kg/m3, cell volume 45.1%, and cell size 0.07 mm.
L4
     ANSWER 12 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2001:808282 CAPLUS
DN
     135:344927
ΤI
     Functionalized ethylene/vinyl or vinylidene aromatic interpolymers
     Drumright, Ray E.; Terbrueggen, Robert H.; Burdett, Kenneth A.; Timmers,
     Francis J.; Hahn, Stephen F.
PA
     The Dow Chemical Company, USA
     U.S., 23 pp.
so
     CODEN: USXXAM
DT
     Patent
T.A
     English
FAN.CNT 1
                       KIND DATE
                                          APPLICATION NO.
     PATENT NO.
                                                                   DATE
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                                           -----
PI US 6313252 B1 20011106 US 1999-244921

US 2002042488 A1 20020411 US 2001-974284

US 2002037988 A1 20020328 US 2001-974102

PRAI US 1999-244921 A3 19990204
                                           US 1999-244921
                                                                   19990204
                                                                   20010110
                                                                   20011010
     Novel substantially random functionalized interpolymers and processes for
     making them are disclosed. The novel interpolymers include those prepared
     from ethylene and vinyl aromatic monomers such as ethylene-styrene
     interpolymers which are then functionalized with a variety of
     electrophilic and nucleophilic reagents.
RE.CNT 17
              THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 13 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
     2001:559587 CAPLUS
DN
     135:137848
     Organometallic compounds with annelated indenyl ligands as polymerization
ΤI
     catalysts
IN
     Becke, Sigurd; Lang, Heinrich; Weiss, Thomas
PA
     Bayer A.-G., Germany
so
     Eur. Pat. Appl., 21 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                                                                   DATE
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                                                                   _____
                        A2 20010801
A3 20021016
PΙ
    EP 1120424
                                          EP 2001-100145
                                                                   20010116
    EP 1120424
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
    DE 10003581
                         A1
                               20010802
                                            DE 2000-10003581
                                                                   20000128
    US 2001014725
                         A1
                                20010816
                                            US 2001-767491
                                                                   20010123
    US 6613713
                         B2
                                20030902
    CA 2332165
                         AA
                                20010728
                                            CA 2001-2332165
                                                                   20010125
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JP 2001-20072 20010129 JP 2001253895 A2 20010918 20000128

PRAI DE 2000-10003581 OS MARPAT 135:137848

Transition metal complexes with annelated indenyl compound ligands of AΒ specified structure are catalysts for the polymerization of olefins and diolefins. Stirring 0.5 mol indan with 0.5 mol acryloyl chloride and AlCl3 in CH2Cl2 at 0° and then at 25° gave 24% 5,6,7-tetrahydroindacen-1-one (I), reduction of which with NaBH4 in Et2O gave the corresponding alc., refluxing of which with p-MeC6H4SO3H in C6H6 gave 90% (based on I) 5,6,7-tetrahydroindacene, bromination of which in Et20 gave 77% 1,2-dibromo derivative, dehydrobromination of which in refluxing tetralin gave 14% 2-bromo-5,6,7-tetrahydroindacen. Grignard reaction of this compound with Me2SiCl2 gave 97% chlorodimethyl(5,6,7tetrahydroindenyl)silane, reaction of which with tert-BuNH2 in Et2O at 0° gave 94% tert-butylamino-2-(5,6,7-tetrahydroindacenyl)dimethylsi lane, reaction of which with BuLi and then TiCl3.3THF in pentane at -78 to +25° gave 60% tert-butylamino-2-(5,6,7tetrahydroindacenyldimethylsilyl)titanium dichloride. Use of this compound in the polymerization of C3H6 is exemplified.

L4ANSWER 14 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

Α

2001:521923 CAPLUS AN

DN 135:108148

Polymer compositions having improved ignition resistance ΤI

Betso, Stephen R.; Guest, Martin J.; Remenar, Richard M.; Kjellqvist, Jerker B. I.; Cheung, Yunwa W.; Kelley, David C.; Van Volkenburgh, William R.; Wevers, Ronald; Keen, Fiona E.; Field, Arnold W.; Reynolds, Ian PA Dow Chemical Co., USA

U.S., 23 pp., Cont.-in-part of U.S. 5,973,049. SO

CODEN: USXXAM

Patent DT

English LA

FAN.	CNT 5																
	PATENT						DATE			APPL	ICAT	ION I	NO.		D	ATE	
PΙ	US 6262						2001				999-					99908	312
	US 5973	049			Α		1999	1026		US 1	997-	8828	19		1:	99706	526
	ES 2201				Т3		2004	0316			998-					99806	522
	ZA 9805	5553			Α		2000	0110		ZA 1	998-	5553			1:	99806	525
	TW 5221	L60			В		2003	0301		TW 1	998-	8711	0280		1:	9980	525
	US 6103	803			Α		2000	0815		US 1	999-	3276	85		1:	99906	508
	CA 2381	1963			AA	•	2001	0222		CA 2	000-	2381	963		2	00008	804
	WO 2001						2001	0222		WO 2	000-	US21	449		2	00008	804
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
							EE,										
		IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	UΖ,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM										
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG			
	EP 1226	208			A1		2002	0731		EP 2	000-	9538	54		2	00001	804
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL							
	JP 2003	35075	80		T2		2003	0225		JP 2	001-	5175	98		2	00001	804
PRAI	US 1997	7-882	819		A2		1997	0626									
	US 1999	-374	097		A		1999	0812									
	WO 2000	-US2	1449		W		2000	0804									
AB	The pre	sent	inv	enti	on re	elat	es t	o coi	mpns	. ha	ving	enh	ance	d ig	niti	on	

resistance, comprising: (A) from about 5 to about 90 percent by weight of at least one substantially random interpolymer (e.g., ethylene-styrene copolymer prepared with metallocene catalysts); (B) from about 10 to about 94.9 percent by weight of at least one filler selected from ammonium polyphosphate, magnesium hydroxide, calcium hydroxide, and aluminum trihydrate; and (C) at least one component selected from; (1) about 5 to about 50 percent by weight of at least one filler; or (2) about 0.5 to about 20 percent by weight of at least one metal borate, and, optionally, about 0.5 to about 10 percent by weight of at least one processing aid; or (3) about

0.1 to about 15 percent by weight of at least one initiator or at least one coupling agent; or (4) about 0.1 to about 20 percent by weight of at least one hindered amine stabilizer.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 15 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 2001:435139 CAPLUS

DN 135:46617

TI Substituted group 4 metal complexes, catalysts and olefin polymerization process

IN Klosin, Jerzy; Kruper, William J., Jr.; Nickias, Peter N.; Roof, Gordon R.; Soto, Jorge

PA The Dow Chemical Company, USA

SO PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

FAN.	PATE					KIN		DATE			APPL	ICAT	ION I	NO.		D	ATE	
ΡI	WO 2	0010								,	WO 2	000-	US31	645		2	0001	117
	,	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
•			CR,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
			ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,
			•	•			•	•	MX,		•	•	•	•	•	•	•	•
			SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	YU,	ZA,	ZW,
			AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM							
		RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
			-		-				GR,								TR,	BF,
			ΒJ,						GN,									
	CA 2					AA			0614									
	BR 2																	
	EP 1								0925								0001	
		R:	-	-	-	-		-	FR,	-	-		LI,	LU,	ΝL,	SE,	MC,	PT,
				-	LT,	-			MK,				<i>-</i> -	_		_		
	EP 1					A1			1030								0001	
		R:	-	-	-	-	-	-	FR,				ыL,	ьu,	ИL,	SE,	MC,	PT,
	TD 2	0021							MK,				2020	00		2	0001	117
	JP 2	0031	.049	30 20		MZ TO		2003	0409	'	TD 2	002-	2039 512 <i>6</i>	10		_	0001	
	JP 2	/ OE 1	00	20		7			0513								0001	
	CN 1 ZA 2	4221	.00 1040	69		Λ		2004	0512		7A 2	002-	1203. 4069	3,		2	0020	
	NO 2								0715								0020	
	NO 2					A			0715									
	ZA 2					A			0211			003-					0030	
PRAI	US 1							1999										
	US 1					P		1999					•					
	US 1					P		1999										
	EP 2	000-	980	485		A3		2000	1117									
	EP 2	002-	174	56		A3		2000	1117									
	JP 2	001-	543	610		A 3		2000	1117									
	WO 2							2000	1117						•			
os	MARP	AT 1	.35:	4661	7													

AB Group 4 metal complexes of the constrained geometry type, catalysts derived therefrom and polymerization processes using the same, characterized by a nitrogen containing aliphatic or cycloaliph. moiety that is substituted with one or more aryl groups, an aryl-substituted silane bridging group, or one or more Group 14 organometalloid substituted hydrocarbyl substituents on the metal. Ethylene ane 1-octene were copolymd. using (N-(1,1-dimethyethyl)-1,1-dimethyl-1-((1,2,3,3a,7a-η)-3-(1,3-dihydro-2H-isoindol-2-yl)-1H-inden-1-yl)silanaminato-(2-)-N-)dimethyltitanium and methyldi(octadecyl)ammonium tetrakis(pentafluorophenyl)borate cocatalyst.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:394140 CAPLUS

DN 136:102681

```
Preparation of phenyl substituted benz[f]indenyl compounds
TI
ΑU
CS
     USA
     Research Disclosure (2001), 445 (May), P817 (No. 445110)
SO
     CODEN: RSDSBB; ISSN: 0374-4353
PΒ
     Kenneth Mason Publications Ltd.
DT
     Journal; Patent
LA
     English
                         KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
     _____
                                -----
     RD 445110
                                20010510
PI
PRAI RD 2001-445110 20010510
     Ph substituted benz[f]indenyl compds. are prepared in high purity from
     1,2-bis(dibromomethyl)benzene, N,N-dimethylformamide, sodium iodide,
     2-cyclopentene-1-one and Ph magnesium bromide. These compds. can be used
     for formation of metal complexes for polymerization catalysts. The use of these
     catalysts was briefly shown for ethylene/styrene copolymn.
     ANSWER 17 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
     2001:152734 CAPLUS
AN
DN
     134:194445
     Process for preparing polymer blends having broad molecular weight
TI
     distribution in a single reactor
     Laughner, Michael K.; Mangold, Debra J.; Parikh, Deepak R.
IN
     Dupont Dow Elastomers L.L.C., USA
PA
     PCT Int. Appl., 67 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                         APPLICATION NO.
                       KIND DATE
     PATENT NO.
                       ----
                              20010301 WO 2000-US22500
     ______
     WO 2001014434
                         A1
                                                                 20000816
PΙ
         W: AU, BR, CA, CN, CZ, HU, ID, JP, KR, MX, NO, PL, SG, US, ZA
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                          B1
                                20020409
                                            US 2000-638846
                                                                   20000814
     US 6369176
                                20010301
                                            CA 2000-2382182
                                                                  20000816
     CA 2382182
                          AA
                                          BR 2000-13335
EP 2000-959254
                                20020402
                                                                  20000816
     BR 2000013335
                         Α
                         A1
                               20020619
                                                                   20000816
     EP 1214365
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
                         T2
                                20030225
                                            JP 2001-518762
                                                                   20000816
     JP 2003507541
     AU 772057
                        B2
                                20040408
                                           AU 2001-16387
                                                                  20000816
     US 2002143122 A1
US 6610800 B2
                                20021003
                                           US 2002-38920
                                                                   20020103
US 6610800 B2 20030826
PRAI US 1999-149853P P 19990819
US 2000-638846 A3 20000814
WO 2000-US22500 W 20000816
     MARPAT 134:194445
OS
     Ethylene-based polymers having mol. weight distribution (MWD) ≥2 are
AB
     made in a single reactor using a mixed constrained geometry catalyst (CGC)
     system. The process comprises the steps of contacting under polymerization
     conditions and in a single reaction vessel, (i) ethylene, (ii) ≥1
     C3-C20 \alpha-olefin, (iii) optionally, \geq 1 polyene, and (iv) a
     mixed CGC system. A diagram illustrating the process is enclosed.
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 18 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
     2001:137502 CAPLUS
AN
     134:179692
DN
     Electrical devices having ethylene interpolymer components
ΤI
     Betso, Stephen R.; Guest, Martin J.; Remenar, Richard M.; Field, Arnold
TN
     W.; Friday, Alan; Freestone, James; Reynolds, Ian; Keen, Fiona E.;
     Kjellqvist, Jerker B. I.; Fassian, Caecille F.; Easter, Mark R.;
     Betteridge, Steven; Martin, Jill M.
PA
     The Dow Chemical Company, USA
SO
     PCT Int. Appl., 58 pp.
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DT
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                      KIND
                               DATE
                                      APPLICATION NO.
                                                                DATE
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                              20010222 WO 2000-US21506 20000804
     WO 2001013381
PΙ
                        A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
             IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         US 1999-374099
     US 6524702
                         B1
                               20030225
                                                                 19990812
     CA 2381760
                         AA
                               20010222
                                         CA 2000-2381760
                                                                 20000804
                                        EP 2000-952591
     EP 1228515
                         A1
                               20020807
                                                                 20000804
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
    JP 2003507849
                         T2
                               20030225
                                          JP 2001-517393
                                                                 20000804
PRAI US 1999-374099
                         A1
                               19990812
     WO 2000-US21506
                         W
                               20000804
    Elec. conductive devices (wire and cable assemblies) comprise \geq 1
AB
     elec. conductive substrate surrounded by a (foamed) interpolymer composition or
     blend, as insulator, protective jacket, shield, etc. The interpolymer
     composition comprises ≥1 substantially random interpolymer of (i)
     polymer units derived from (a) ≥1 vinyl or vinylidene aromatic
     monomer, or (b) ≥1 hindered aliphatic or cycloaliph. vinyl or
    vinylidene monomer, or (c) a combination of ≥1 vinyl or vinylidene
     aromatic monomer and ≥1 hindered aliphatic or cycloaliph. vinyl or
     vinylidene monomer, and (ii) polymer units derived from ≥1 aliphatic
    olefin monomer having 2-20 C atoms. Ethylene-styrene interpolymers were
    prepared using metallocene catalysts.
             THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 11
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 19 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
     2001:137501 CAPLUS
AN
DN
     134:179691
     Electrical devices having ethylene interpolymer components
TI
     Betso, Stephen R.; Fassian, Caecille F.
IN
PA
     The Dow Chemical Company, USA
SO
     PCT Int. Appl., 50 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 2
                        KIND
                              DATE
                                         APPLICATION NO.
                                                                 DATE
                       ----
                                           ______
                                          WO 2000-US21450
PΙ
     WO 2001013380
                        A1
                               20010222
                                                                 20000804
                        C2
     WO 2001013380
                               20020912
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
            IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6524702
                         B1
                               20030225
                                         US 1999-374099
                                                                 19990812
     CA 2381499
                               20010222
                                          CA 2000-2381499
                         AA
     EP 1210716
                         A1
                               20020605
                                          EP 2000-950993
                                                                 20000804
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
                               20030225
     JP 2003507848
                         T2
                                          JP 2001-517392
                                                                 20000804
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CODEN: PIXXD2

PRAI US 1999-374099

A1

19990812

WO 2000-US21450 20000804 Elec. conductive devices (wire and cable assemblies) comprise ≥ 1 elec. conductive substrate surrounded by a (foamed) interpolymer composition or blend, as insulator, protective jacket, shield, etc. The interpolymer composition comprises ≥1 substantially random interpolymer of (i) polymer units derived from (a) ≥1 vinyl or vinylidene aromatic monomer, or (b) ≥1 hindered aliphatic or cycloaliph. vinyl or vinylidene monomer, or (c) a combination of ≥1 vinyl or vinylidene aromatic monomer and ≥1 hindered aliphatic or cycloaliph. vinyl or vinylidene monomer, and (ii) polymer units derived from ≥1 aliphatic olefin monomer having 2-20 C atoms. Ethylene-styrene interpolymers were prepared using metallocene catalysts. THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 2 ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 20 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN L4AN 2001:137289 CAPLUS DN 134:179360 Improved thermoplastic compositions for processes such as rotational ΤI molding and durable goods applications IN Chaudhary, Bharat I.; Markovich, Ronald P.; Nieto, Jesus; Laubach, Adam E. The Dow Chemical Company, USA PA SO PCT Int. Appl., 59 pp. CODEN: PIXXD2 DT Patent English LA FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. A1 20010222 WO 2000-US22231 20000810 WO 2001012714 PΙ W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1999-374100 US 6362270 B1 20020326 19990812 AU 2000-66401 AU 2000066401 20010313 20000810 **A5** EP 2000-954053 20020731 20000810 EP 1226211 **A1** AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 2003507511 T2 20030225 JP 2001-517604 20000810 US 2002077401 US 2001-3639 20011102 A1 20020620 PRAI US 1999-374100 A1 19990812 WO 2000-US22231 W 20000810

MO 2000-US22231 W 20000810

The compns. have improved processability and/or improved phys. and mech. properties. The compns. often exhibit ≥1 of reduced low shear viscosity, reduced melt elasticity at low shear rate, reduced cycle times, improved sintering, faster bubble removal, a wide range of processing temps., improved low temperature and/or room temperature impact, good or improved environmental stress crack resistance, acceptable heat distortion temperature, and acceptable flexural and secant modulus. Molded samples of 70% polypropylene and 30% ethylene-styrene copolymer had notched Izod impact strength 0.93 ft-lb/in and environmental stress crack resistance 2183 h;

vs. 0.26 and 191, resp., for 100% polypropylene.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:137283 CAPLUS

DN 134:179358

TI Compositions having improved ignition resistance and molded products

IN Betso, Stephen R.; Guest, Martin J.; Kjellqvist, Jerker B. I.; Cheung, Yunwa W.; Van Volkenburgh, William R.; Wevers, Ronald; Keen, Fiona E.; Field, Arnold W.; Reynolds, Ian; Remenar, Richard M.; Kelley, David C. PA The Dow Chemical Company, USA

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PCT Int. Appl., 61 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 5
                                          APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE
                                                                  DATE
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     _____
                               _____
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                                         WO 2000-US21449
     WO 2001012708
                               20010222
                                                                  20000804
PΤ
                         A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
             IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, YU, ZA, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6262161
                               20010717 · US 1999-374097
                                                                   19990812
                         B1
     CA 2381963
                                20010222
                                         CA 2000-2381963
                                                                  20000804
                         AA
                                         EP 2000-953854
     EP 1226208
                               20020731
                                                                  20000804
                         A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003507508
                         T2
                               20030225
                                           JP 2001-517598
                                                                   20000804
PRAI US 1999-374097
                         Α
                               19990812
     US 1997-882819
                         A2
                               19970626
     WO 2000-US21449
                         W
                               20000804
     The interpolymer compns. comprise (A) 5-90% ≥1 substantially random
AB
     interpolymer prepared by polymerizing ethylene and/or \geq 1 \alpha-olefin
     monomers with ≥1 vinyl or vinylidene aromatic monomers, e.g.
     ethylene-styrene copolymers and optionally with other polymerizable
     ethylenically unsatd. monomer(s), (B) 10-94.9% ≥1 filler selected
     from ammonium polyphosphate, Mg hydroxide, Ca hydroxide, and Al
     trihydrate, and (C) \geq 1 components selected from (1) 5-50% \geq 1
     filler selected from talc, Ca carbonate, glass fibers, marble dust, cement
     dust, clay, feldspar, SiO2 or glass, fumed SiO2, silicates, alumina, Mg
     oxide, Sb oxide, Zn oxide, Ba sulfate, Al silicate, Ca silicate, Ti
     oxides, glass microspheres, mica, clays, wollastonite, and chalk, (2)
     0.5-20% ≥1 metal borate of Group IIA, and, optionally, 0.5-10%
     ≥1 processing aid selected from polydimethylsiloxane,
     organopolysiloxanes, tartaric acid, stearic acid, Zn stearic, waxes, and
     high melt flow polyolefins, (3) 0.1-15% ≥1 initiator or ≥1
     coupling agent selected from organic peroxides, silanes, titanates,
     zirconates, multifunctional vinyl compds. and organic azides, and (4) 0.1-20%
     ≥1 hindered amine stabilizer. Ethylene-styrene copolymer containing
     30% aluminum trihydrate was self extinguishing and could incorporate some
     carbonate without property loss.
RE.CNT
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 22 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
     2001:115195 CAPLUS
DN
     134:179008
     Azidosilane-modified, moisture-curable polyolefin polymers, process for
ΤI
     making, and articles obtained therefrom
     Drumright, Ray E.; Ho, Thoi H.; Terbrueggen, Robert H.
IN
PA
     The Dow Chemical Company, USA
     PCT Int. Appl., 63 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                           APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE .
                                                                  DATE
                               -----
                                           -----
                        ____
PΙ
                               20010215
                                          WO 2000-US20912
     WO 2001010914
                         A1
                                                                  20000801
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
            IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
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SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW, AM, AZ,

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CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            US 1999-370309
                                                                    19990809
     US 6331597
                          В1
                                20011218
     EP 1218422
                          A1
                                20020703
                                           EP 2000-952354
                                                                    20000801
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003506533
                          Т2
                                20030218
                                            JP 2001-515721
                                                                    20000801
PRAI US 1999-370309
                          A2
                                19990809
                          W
     WO 2000-US20912
                                20000801
     The invention includes a water-curable azidosilane grafted polymer
AB
     selected from the group consisting of (i) homogeneous ethylene polymers
     which have d. ≤0.900, and (ii) interpolymers of at least one
     ethylene or \alpha-olefin and at least one vinylidene aromatic compound. The
     water-curable silane-grafted polymer may comprise the reaction product of:
     at least one first polymer, the first polymer selected from the group
     consisting of an interpolymer, a substantially linear ethylene polymer,
     and a mixture thereof; the interpolymer comprising polymer units of at least
     one ethylene or \alpha-olefin and at least one vinylidene aromatic compound;
     and at least one monofunctional azidosilane. The invention further
     includes a process for producing a water-curable silane-grafted polymer.
     A further embodiment of the process of the invention comprises shaping the
     water-curable silane-grafted polymer and contacting the shaped water
     curable silane-grafted polymer to form a moisture-cured polymer. The
     invention also includes the water curable silane-grafted polymers produced
     by either of the two processes along with any articles obtainable from
     that water curable silane-grafted polymer.
              THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
```

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

RE.CNT 9 ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 23 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
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BY, KG, KZ, MD, RU, TJ, TM

2001:110111 CAPLUS AN

DN 134:164187

TTAcoustical insulation foams

IN Chaudhary, Bharat I.; Barry, Russell P.; Park, Chung P.; Reimers, Martin

PA The Dow Chemical Company, USA

U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 428,575. SO

CODEN: USXXAM

DТ Patent

LA English

L WIN.	CNI Z				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 6187232	B1	20010213	US 2000-488220	20000119
	US 6231795	B1	20010515	US 1998-205938	19981204
	US 6133333	A	20001017	US 1999-428575	19991026
	US 6369120	B 1	20020409	US 2000-689926	20001012
	US 2002121717	A1	20020905	US 2002-37396	20020104
	US 2003162852	A1 .	20030828	US 2003-37363	20030106
PRAI	US 1998-205938	A3	19981204		
	US 1999-428575	A2	19991026		
	US 2000-488220	A3	20000119		
3.5			c. ,	14.1 . 14.1 . 14.1	

An acoustical insulation foam having, either with or without AΒ elastification, an Asker C hardness of less than about 65, a d. of about 5 to about 150 kg/m3, a cell size of about 0.05 to about 15 mm, an open cell content of 0 to about 100 volume percent, a thickness of about 1 to about 200 mm, and a width of about 100 to about 3000 mm; comprises; (A) one or more alkenyl aromatic polymers, (B) one or more substantially random interpolymers and (C) optionally, one or more nucleating agents and (D) optionally, one or more other additives; and (E) one or more blowing agents.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 24 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN L4
- 2000:824317 CAPLUS AN
- DN134:5814
- Highly crystalline ethylene-α-olefin-polyene interpolymers and ΤI

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compositions, preparation thereof, and articles therefrom
     Hughes, Morgan Mark; Walton, Kim Louis; Daniel, Christian
IN
PA
     Dupont Dow Elastomers L.L.C., USA
SO
     PCT Int. Appl., 99 pp.
     CODEN: PIXXD2
     Patent
DT
LA
     English
FAN.CNT 1
                                          APPLICATION NO.
     PATENT NO.
                         KIND DATE
                                                                       DATE
     WO 2000069930
                                              -----
                                                                       -----
                                  -----
                                  20001123 WO 2000-US13159
                                                                       20000512
ΡI
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
              KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
              MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
              TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                  20001123 CA 2000-2372056
20020306 EP 2000-930700
                            AA
                                                                         20000512
     CA 2372056
     EP 1183286
                                                                         20000512
                            A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
     BR 2000011524
                           Α
                                  20020326
                                               BR 2000-11524
                                                                         20000512
                            T2
                                               JP 2000-618345
                                                                         20000512
     JP 2002544344
                                  20021224
PRAI US 1999-134360P
                           P
                                  19990514
                           W
                                  20000512
     WO 2000-US13159 .
     High crystallinity (>16%) random 84-99:>0-<16:>0-<15 ethylene/C3-20
AB
     α-olefin/polyene interpolymers (Tg >-45°), whether grafted
     with an unsatd. monomer or not, and if grafted, whether crosslinked or
     not, can be used alone or blended with other natural or synthetic polymers
     to form compns. The polymer and the polymer blend compns. have desirable
     phys. properties and are useful in fabricating a variety of finished
     products, such as belts, cable insulation, fibers, laminates, foams,
     shrink tubing, etc. (no data). Thus, a 91.8:4.5:3.6 ethylene-propene-5-
     ethylidene-2-norbornene terpolymer prepared with a catalyst system
     comprising (tert-butylamido)dimethyl(n5-2-methyl-s-indacen-1-
     yl)silanetitanium(II) 1,3-pentadiene, tris(pentafluorophenyl)borane, and a
     modified methylalumoxane scavenger, and having Mw 95,300, Mn 49,400, Mw/Mn
     1.93, d. 0.922 g/cc, peak m.p. 108°, crystallinity 37%, Tg -15, tensile strength at break 21.6 MPa, elongation at break 666, and Mooney
     viscosity (ML1+4 at 25°) 16.9, was vulcanized (10 parts) with
     Plioflex 1502 85, butadiene rubber 15, carbon black 60, and typical
     compounding additives, giving T90 5.8 min and abrasion resistance (volume
     loss) 91.6.
RE.CNT 9
               THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 25 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
     2000:628211 CAPLUS
DN
     133:224082
     Process for preparing polyolefin thermoplastic vulcanizates
TI
     Terbrueggen, Robert H.; Drumright, Ray E.; Ho, Thoi H.
IN
     Dow Chemical Company, USA
PA
     PCT Int. Appl., 52 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                           KIND
                                  DATE
                                               APPLICATION NO.
                                                                        DATE
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                                                                         _____
                                  20000908
                                             WO 2000-US5045
PΙ
     WO 2000052091
                           A1
                                                                        20000224
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
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CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          US 1999-257771
                                                                   19990225
                                20010821
     US 6277916
                         В1
                                           CA 2000-2364438
                                                                   20000224
     CA 2364438
                                20000908
                         AA
                                           EP 2000-914737
                                                                   20000224
     EP 1157066
                         A1
                                20011128
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     BR 2000010275
                               20020115
                                          BR 2000-10275
                                                                   20000224
                         Α
     JP 2002538256
                         T2
                               20021112
                                           JP 2000-602712
                                                                   20000224
PRAI US 1999-257771
                         Α
                               19990225
                         W
                               20000224
     WO 2000-US5045
     This invention includes a process for forming a thermoplastic vulcanizate
AB
     comprising: (a) mixing a C-H insertion curing agent with at least one
     elastomeric phase polymer to form a first admixt.; (b) mixing at least one
     non-elastomeric polyolefin with the first admixt. to form a second
     admixt.; and (c) heating the second admixt. to a temperature at least the
     decomposition temperature of the curing agent to crosslink the elastomeric phase
     while mixing the admixt. to an extent sufficient to result in the
     formation of a thermoplastic material, hereinafter referred to as a
     thermoplastic vulcanizate, and optionally including an addnl. step (d) of
     shaping the resulting thermoplastic vulcanizate, especially by heating and
     foaming or molding the TPV. The C-H insertion curing agent is preferably
     selected from alkyl and aryl azides (R-N3), acyl azides (R-C(O)N3),
     azidoformates ((R-O-C(O)-N3), sulfonyl azides (R-SO2-N3), phosphoryl
     azides (RO)2-(PO)-N3), phosphinic azides (R2-P(O)-N3) and silyl azides
     (R3-Si-N3), with poly(sulfonyl azide) most preferred. Addnl., the
     invention includes a thermoplastic vulcanizate comprising a blend of: (1)
     an elastomeric phase crosslinked using a C-H insertion curing agent
     dispersed in; (2) at least one non-elastomeric thermoplastic polyolefin.
     The invention also includes a foamable composition comprising (1) an
     elastomeric phase crosslinked using a C-H insertion curing agent dispersed
     in; (2) at least one non-elastomeric thermoplastic polyolefin; and (3)
     from 0.1 to 25% based on the combined weight of components (1) and (2) of at
     least one foaming agent as well as a fabricated part, cable jacket, cable
     insulation, or foam comprising the thermoplastic vulcanizate or the
     invention or resulting from the process of the invention.
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 26 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
ΑN
     2000:401899 CAPLUS
DN
     133:44646
     Soft, flexible foams from blends of alkenyl aromatic polymers and
TI
     \alpha-olefin/vinyl or vinylidene aromatic and/or sterically hindered
     aliphatic or cycloaliphatic vinyl or vinylidene interpolymers
     Chaudhary, Bharat I.; Hood, Lawrence S.; Barry, Russell P.
IN
PA
     The Dow Chemical Company, USA
SO
     PCT Int. Appl., 63 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 2
                                          APPLICATION NO.
     PATENT NO.
                       KIND
                               DATE
                                                                  DATE
                                            _____
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                                -----
                                           WO 1999-US26970
                                20000615
                                                                   19991116
PΙ
     WO 2000034363
                         A2
     WO 2000034363
                         A3
                                20000921
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           US 1998-205938
                                                                   19981204
     US 6231795
                         B1
                                20010515
     CA 2353089
                         AA
                                20000615
                                           CA 1999-2353089
                                                                   19991116
                                         EP 1999-961671
     EP 1144489
                         A2
                                20011017
                                                                  19991116
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

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Α
                                             BR 1999-16946
     BR 9916946
                                20011218
                                                                     19991116
     JP 2002531656
                          T2
                                 20020924 JP 2000-586804
                                                                    19991116
     NO 2001002694
                                           NO 2001-2694
                         Α
                                 20010709
                                                                     20010531
                       A2
W
PRAI US 1998-205938
                                 19981204
     WO 1999-US26970
                                 19991116
AΒ
     A soft foam having an Asker C hardness of less than about 65, comprises:
     (A) from 30 to 70% of one or more alkenyl aromatic polymers and wherein at
     least one of said alkenyl aromatic polymers has a mol. weight (Mw) of from
     100,000 to 500,000; and (B) from 30 to 70% of one or more substantially
     random interpolymers having an I2 of 0.1 to 50g/10 min, an Mw/Mn of 1.5 to
     20; comprising (1) from 8 to 45 mol percent of polymer units derived from:
     (a) at least one vinyl or vinylidene aromatic monomer, or (b) at least one
     hindered aliphatic or cycloaliph. vinyl or vinylidene monomer, or (c) a
     combination of at least one aromatic vinyl or vinylidene monomer and at least
     one hindered aliphatic or cycloaliph. vinyl or vinylidene monomer, and (2)
     from 55 to 92 mol percent of polymer units derived from at least one of
     ethylene and/or a C3-20 \alpha-olefin; and (3) from 0 to 20 mol percent
     of polymer units derived from one or more of ethylenically unsatd.
     polymerizable monomers other than those derived from (1) and (2); and (C)
     optionally, one or more nucleating agents; and (D) optionally, one or more
     other additives; and (E) one or more blowing agents present in a total
     amount of from 0.4 to 5.0 g-moles per kg. A foam was prepared from an
     ethylene-styrene copolymer and polystyrene.
     ANSWER 27 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
     2000:314745 CAPLUS
AN
DN
     132:322897
     Shear thinning ethylene/\alpha-olefin interpolymers and their
TI
     preparation, for molded articles
     Cady, Larry Duane; Hughes, Morgan Mark; Laughner, Michael Kenneth; Meiske,
IN
     Larry Alan; Parikh, Deepak Rasiklal
PΑ
     Dupont Dow Elastomers LLC, USA
SO
     PCT Int. Appl., 63 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                       KIND DATE APPLICATION NO.
     PATENT NO.
                                                                   DATE
     WO 2000026268 A1 20000511 WO 1999-US25637 19991102
PΙ
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             MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN,
             YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2347501
                          AA
                                20000511 CA 1999-2347501
                                                                    19991102
                                20011204 BR 1999-15199
20011205 EP 1999-971431
     BR 9915199
                          Α
                                                                    19991102
     EP 1159320
                          A1
                                                                    19991102
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002528610
                          T2
                                20020903
                                             JP 2000-579651
                                                                    19991102
     CN 1134466
                          В
                                             CN 1999-815105
                                20040114
                                                                    19991102
    US 6680361 B1 20040120

US 2004122190 A1 20040624

US 1998-106569P P 19981102

WO 1999-US25637 W 19991102

US 2001-830936 A1 20010502
                                             US 2001-830936
                                                                    20010502
                                            US 2003-719381
                                                                    20031120
PRAI US 1998-106569P
     Shear-thinning ethylene/\alpha-olefin and ethylene/\alpha-olefin/diene
AB
     monomer interpolymers (or blends) that do not include a traditional
     branch-inducing monomer such as norbornadiene are prepared at an elevated
     temperature in an atmospheric that has little or no H using a constrained geometry
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IE, SI, LT, LV, FI, RO

ethylidene-2-norbornene-propylene elastomer was prepared
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

complex catalyst and an activating cocatalyst. Thus, ethylene-5-

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L4
    ANSWER 28 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
    2000:314702 CAPLUS
AN
DN
    132:322268
     Preparation of titanium(II) or zirconium(II) complexes
TI
IN
     Rosen, Robert K.
PA
     The Dow Chemical Company, USA
     PCT Int. Appl., 20 pp.
SO
     CODEN: PIXXD2
DT
     Patent
T.A
    English
FAN.CNT 1
                                                                  DATE
    PATENT NO.
                        KIND
                              DATE
                                         APPLICATION NO.
                              20000511 WO 1999-US22359 19990928
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    WO 2000026221
                        A1
PΙ
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            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
            SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                               20000511
                                         CA 1999-2343948
                                                                  19990928
     CA 2343948
                         AA
                                           AU 1999-64020
                                                                  19990928
     AU 9964020
                         A1
                               20000522
                                           US 1999-407654
                                                                  19990928
    US 6090962
                         Α
                               20000718
                                           EP 1999-951614
                                                                  19990928
     EP 1124834
                               20010822
                         A1
    EP 1124834
                               20021106
                         В1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                         T2
                                           JP 2000-579609
                                                                  19990928
                               20020903
    JP 2002528551
                         E
                               20021115
                                           AT 1999-951614
                                                                  19990928
     AT 227302
     NO 2001002012
                               20010424
                                           NO 2001-2012
                                                                  20010424
                         Α
PRAI US 1998-106162P
                         Ρ
                               19981029
                        W
     WO 1999-US22359
                              19990928
     Titanium and zirconium complexes comprising one or more, cyclic,
AB
    delocalized \pi-bonded ligand groups wherein the metal of said complexes
     is in the +2 formal oxidation state are prepared in high yield and purity by
     reaction of the corresponding titanium or zirconium halides in the +3 or
     +4 oxidation state with a di(C1-20alkyl) magnesium reagent. The complexes
     are used as catalyst components for olefin polymerization catalysts.
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 29 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
     2000:290932 CAPLUS
ΑN
     132:309415
DN
     Multilayer structures of polymer and lignocellulosic materials
TI
    Dubensky, Ellen M.; Liang, Wenbin; Betso, Stephen R.; Boldo, Renzo;
IN
     Kocher, Roger; Read, Michael D.; Harelle, Ludovic; Kjellqvist, Jerker B.
     L.; Parkinson, Shaun
     The Dow Chemical Company, USA
PA
     PCT Int. Appl., 55 pp.
SO
     CODEN: PIXXD2
     Patent
DT
     English
LΑ
FAN.CNT 1
                        KIND
                               DATE
                                         APPLICATION NO.
     PATENT NO.
                                                                 -----
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                                         WO 1999-US24719
                                                                 19991022
     WO 2000024577
                         A1
                               20000504
PΙ
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ,
             DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,
             IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
             MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
             TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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CA 1999-2344889
     CA 2344889
                         AA
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                                                                  19991022
                                           EP 1999-956633
     EP 1140489 ·
                         A1
                               20011010
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2002528299
                         T2
                               20020903
                                           JP 2000-578164
                                                                  19991022
PRAI US 1998-105339P
                         P
                               19981023
     US 1999-131839P
                         P
                               19990430
                         W
     WO 1999-US24719
                               19991022
     A multilayer structure useful in making floor, wall, ceiling coverings,
     furniture, decorative overlays etc. comprises a lignocellulose-based layer
     and a copolymer layer free from substantial amount of tackifier comprising
     \alpha-olefin monomers, vinyl or vinylidene aromatic monomers, sterically
     hindered aliphatic or cycloaliph. vinyl or vinylidene monomers, and
     optionally other polymerizable ethylenically unsatd. monomer(s).
     sheet was cast from ethylene-styrene copolymer 85, polyethylene containing 2%
     erucamide 10, and polyethylene containing 20% silica 5% and heat-laminated to
     a wood veneer.
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
      11
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 30 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
     2000:260658 CAPLUS
AN
DN
     132:294807
     Alpha-olefin/vinyl or vinylidene aromatic and/or sterically hindered
     aliphatic or cycloaliphatic vinyl or vinylidene interpolymers for carpet
     applications
     Bieser, John O.
IN
PΑ
     The Dow Chemical Company, USA
SO
     PCT Int. Appl., 83 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                                                                  DATE
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                               -----
                                           -----
                              20000420 WO 1999-US20618
PΙ
     WO 2000022226
                        A1
                                                                 19990909
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
             TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 9959138
                              20000501 AU 1999-59138
                         A1
                                                                  19990909
     EP 1141475
                         A1
                               20011010
                                          EP 1999-946813
                                                                  19990909
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    JP 2002527639
                         T2
                             20020827
                                           JP 2000-576109
                                                                  19990909
PRAI US 1998-104378P
                         P
                               19981015
    WO 1999-US20618
                         W
                               19990909
AB
    The title polymers are prepared by melt blending ≥1 substantially
    random interpolymer derived from ethylene and/or \geq 1 \alpha-olefin
    monomers with specific amts. of ≥1 vinyl or vinylidene aromatic
    monomers and/or sterically hindered aliphatic or cycloaliph. vinyl or
    vinylidene monomers. The melt (optionally blended with filler and other
    polymers) is applied to the tufted carpet by extrusion coating. Thus, an
     example melt of ethylene-styrene copolymer (77.3% styrene, melt index 6.25
    g/10 min) was extruded (5.4 oz/yd2) onto tufted carpet squares.
RE.CNT 3
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
    ANSWER 31 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
AN
    2000:144886 CAPLUS
DN
    132:194832
ΤI
    Metalloid salt catalyst/activators for olefin polymerization
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IN

PA

Klosin, Jerzy

The Dow Chemical Company, USA

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CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                         APPLICATION NO.
                                                                DATE
     PATENT NO.
                    AIB
                      KIND
                             DATE
                        A1 20000302 WO 1999-US7770
     _____
                                                                 -----
                                                               19990409
PT
     WO 2000011006
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                        AU 1999-35514
    AU 9935514
                        A1
                              20000314
                              20010619
                                         US 1999-289335
    US 6248914
                        B1
                                                                19990409
PRAI US 1998-96946P
                        Р
                              19980818
                        P
     US 1998-104369P
                               19981015
    WO 1999-US7770
                         W
                              19990409
    MARPAT 132:194832
os
AΒ
    Disclosed is a compound useful as a catalyst or as a cocatalyst in
     combination with a Group 3-10 metal for addition polymerization corresponding to the
     formula: [M'Q12L'l']+(Arf3MQ2)- wherein: M' is aluminum, gallium, or
     indium, M is boron, aluminum, gallium or indium; Q1 is C1-20 hydrocarbyl,
     optionally substituted with one or more groups which independently each
     occurrence are hydrocarbyloxy, hydrocarbylsiloxy, hydrocarbylsilylamino,
     di(hydrocarbylsilyl)amino, hydrocarbylamino, di(hydrocarbyl)amino,
     di(hydrocarbyl)phosphino, or hydrocarbylsulfido groups having from 1 to 20
     atoms other than hydrogen, or, optionally, two or more Q1 groups may be
     covalently linked with each other to form one or more fused rings or ring
    systems; Q2 is an alkyl group, optionally substituted with one or more
     cycloalkyl or aryl groups, said Q2 having from 1 to 30 carbons; L' is a
     monodentate or polydentate Lewis base; l' is a number greater than zero
     indicating the number of Lewis base moieties, L', and Arf independently each
     occurrence is an anionic ligand group of up to 30 atoms not counting
     hydrogen. Polymerization of ethylene with 1-octene using (tert-
     butylamido) (tetramethylcyclopentadienyl)dimethylsilanetitanium
     1,3-pentadiene and [Al(CH3)2\cdot 2(C2H5)2O] + [B(C6F5)3(CH3)] - (I) as
     cocatalyst gave a copolymer at better yield and higher micro melt index
     value than a similar polymerization using trispentafluorophenylborane/Me
     aluminoxane in place of I.
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 6
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 32 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2000:133688 CAPLUS
DN
    132:166737
     Catalyst activator composition for olefin polymerization
TI
IN
     Chen, Eugene Y.; Kruper, William J., Jr.; Roof, Gordon R.
    Dow Chemical Company, USA
PA
    PCT Int. Appl., 36 pp.
SO
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 4
     PATENT NO.
                        KIND DATE
                                         APPLICATION NO.
                                                                DATE
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                             20000224 WO 1999-US13346
                        A1
PΙ
    WO 2000009515
                                                                19990611
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            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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PCT Int. Appl., 31 pp.

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19990611
                                            CA 1999-2337380
     CA 2337380
                          AΑ
                                20000224
                                            AU 1999-45647
                                                                   19990611
     AU 9945647
                          A1
                                20000306
                                                                   19990611
     US 6214760
                          В1
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     EP 1104426
                          A1
                                20010606
                                            EP 1999-928618
     EP 1104426
                          B1
                                20020814
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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     AT 222257
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                          E
                                            AT 1999-928618
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     JP 2003528159
                         T2
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                               20011021
                                            TW 1999-88113056
                                                                  19990730
PRAI US 1998-96088P
                         P
                               19980811
                         P
     US 1998-104229P
                               19981014
     WO 1999-US13346
                         W
                               19990611
os
     MARPAT 132:166737
     The title composition comprises a mixture of Al containing Lewis acids,
AB
     (Arf3Al)(AlQ13)y(AlQ20)z, where Arf is a fluorinated aromatic hydrocarbyl
     moiety of 6-30 C atoms; Q1 = C1-20-alkyl; Q2 = C1-20 hydrocarbyl,
     optionally substituted with ≥1 hydrocarbyloxy, hydrocarbylsiloxy,
     hydrocarbylsilylamino, di(hydrocarbylsilyl)amino, hydrocarbylamino,
     di(hydrocarbyl)amino, di(hydrocarbyl)phosphino, or hydrocarbylsulfido
     groups having 1-20 atoms other than H, or, optionally, ≥2 Q2 groups
     may be covalently linked with each other to form ≥1 fused rings or
     ring systems; y = 0-1.0; z = 0.1-20; and the moieties (Arf3Al)(AlO13)y may
     exist as discrete entities or dynamic exchange products. An example
     activator was the adduct (1/6.4) of tris(perfluorophenyl)borane with
    MMAO-3A.
RE.CNT 9
              THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 33 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2000:133687 CAPLUS
DN
     132:166736
TI
     Mixture of fluoroarylaluminum and aryloxyaluminum catalyst activator
     composition for olefin polymerization
IN
     Chen, Eugene Y.; Kruper, William J., Jr.; Roof, Gordon R.; Schwartz, David
     J.; Storer, Joey W.
PA
     The Dow Chemical Co., USA
SO
     PCT Int. Appl., 32 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 4
     PATENT NO.
                        KIND DATE
                                          APPLICATION NO.
                                                                 DATE
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                                           WO 1999-US13345
PΙ
     WO 2000009514
                         A1
                               20000224
                                                                  19990611
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            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
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             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2337346
                               20000224
                                           CA 1999-2337346
                         AΑ
                                                                   19990611
    AU 9945646
                         Α1
                               20000306
                                           AU 1999-45646
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    US 6211111
                               20010403
                                           US 1999-330675
                         В1
                                                                   19990611
     EP 1105398
                               20010613
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                         A1
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     EP 1105398
                         B1
                               20020717
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
    JP 2002522547
                         T2
                               20020723
                                            JP 2000-564965
                                                                   19990611
    AT 220682
                         E
                               20020815
                                           AT 1999-928617
                                                                   19990611
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US 2001018396

US 1998-100490P

US 1999-330675

WO 1999-US13345

US 6387838

PRAI US 1998-96800P

A1

B2

P

P

W

A3

20010830

20020514

19980817

19980916

19990611

19990611

US 2001-772592

20010130

os MARPAT 132:166736

The activators are described as aryloxyaluminum compds. AlArfQ1Q2, or a AΒ dimer, adduct, or mixture that are mixed with Al compds. AlArf3 at ratio 1:0.1-10, where Arf is a fluorinated aromatic hydrocarbonyl moiety of 6-30 C atoms; Q1 = Arf or a C1-20 hydrocarbyl group, optionally substituted with ≥1 cyclohydrocarbyl, hydrocarbyloxy, hydrocarbylsiloxy, hydrocarbylsilylamino, hydrocarbylsilyl, silylhydrocarbyl, di(hydrocarbylsilyl)amino, hydrocarbylamino, di(hydrocarbyl)amino, di(hydrocarbyl)phosphino, or hydrocarbylsulfido groups having 1-20 atoms other than H, or further optionally, such substituents may be covalently linked with each other to form ≥1 fused rings or ring systems; and Q2 = aryloxy, arylsulfide or di(hydrocarbyl)amido group, optionally substituted with ≥1 hydrocarbyl, cyclohydrocarbyl, hydrocarbyloxy, hydrocarbylsiloxy, hydrocarbylsilylamino, hydrocarbylsilyl, silylhydrocarbyl, di(hydrocarbylsilyl)amino, hydrocarbylamino, di(hydrocarbyl)amino, di(hydrocarbyl)phosphino, or hydrocarbylsulfido groups having 1-20 atoms other than H, or, further optionally such substituents may be covalently linked with each other to form ≥1 fused rings or ring systems, the Q2 having 3-20 atoms other than H. example activator was a mixture of tris(perfluorophenyl)aluminum and diisobutyl-(2,6-tert-butyl-4-methylphenoxy)aluminum.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 34 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN L4

2000:133686 CAPLUS AN

DN 132:166735

ΤI Three coordinate aryloxyaluminum catalyst activator composition and its manufacture for olefin polymerization

Chen, Eugene Y.; Kruper, William J., Jr.; Roof, Gordon R.; Schwartz, David IN J.; Storer, Joey W.

The Dow Chemical Company, USA PA

PCT Int. Appl., 32 pp. SO

CODEN: PIXXD2

DTPatent

English LA

FAN.	CNT 1	עדאוו האיים	APPLICATION NO.	ን አጥ ር
		KIND DATE		
ΡI			WO 1999-US13343	
	W: AE, AL, AM,	AT, AU, AZ, BA,	BB, BG, BR, BY, CA, CH,	CN, CU, CZ,
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	JP, KE, KG,	KP, KR, KZ, LC,	LK, LR, LS, LT, LU, LV,	MD, MG, MK,
	MN, MW, MX,	NO, NZ, PL, PT,	RO, RU, SD, SE, SG, SI,	SK, SL, TJ,
	TM, TR, TT,	UA, UG, UZ, VN,	YU, ZA, ZW, AM, AZ, BY,	KG, KZ, MD,
	RU, TJ, TM			
	RW: GH, GM, KE,	LS, MW, SD, SL,	SZ, UG, ZW, AT, BE, CH,	CY, DE, DK,
	ES, FI, FR,	GB, GR, IE, IT,	LU, MC, NL, PT, SE, BF,	BJ, CF, CG,
		GN, GW, ML, MR,		
			CA 1999-2336793	
	-		AU 1999-44403	
			US 1999-330671	
			EP 1999-927518	19990611
	EP 1105397			
	R: AT, BE, CH, IE, FI	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
	JP 2002522546	T2 20020723	JP 2000-564964	19990611
	AT 233772		AT 1999-927518	19990611
	TW 469272	B 20011221	TW 1999-88113068	19990730
	US 6528449	B1 20030304	US 2000-702442	20001031
PRAI	US 1998-96801P	P 19980817		
	US 1998-100487P	P 19980916		
	US 1999-330671		·	
	WO 1999-US13343	W 19990611		
os	MARPAT 132:166735			

AB The activators are described as aryloxyaluminum compds. AlArfQ1Q2, or a dimer, adduct, or mixture and further mixts. with Al compds. AlArf3, where Arf is a fluorinated aromatic hydrocarbonyl moiety of 6-30 C atoms; Q1 = Arf or a C1-20 hydrocarbyl group, optionally substituted with ≥1

cyclohydrocarbyl, hydrocarbyloxy, hydrocarbylsiloxy, hydrocarbylsilylamino, hydrocarbylsilyl, silylhydrocarbyl, di(hydrocarbylsilyl)amino, hydrocarbylamino, di(hydrocarbyl)amino, di(hydrocarbyl) phosphino, or hydrocarbyl sulfido groups having 1-20 atoms other than H, or further optionally, such substituents may be covalently linked with each other to form ≥1 fused rings or ring systems; and Q2 = aryloxy, arylsulfide or di(hydrocarbyl)amido group, optionally substituted with ≥1 hydrocarbyl, cyclohydrocarbyl, hydrocarbyloxy, hydrocarbylsiloxy, hydrocarbylsilylamino, hydrocarbylsilyl, silylhydrocarbyl, di(hydrocarbylsilyl)amino, hydrocarbylamino, di(hydrocarbyl)amino, di(hydrocarbyl)phosphino, or hydrocarbylsulfido groups having 1-20 atoms other than H, or, further optionally such substituents may be covalently linked with each other to form ≥1 fused rings or ring systems, the Q2 having 3-20 atoms other than H. example activator was diisobutyl-(2,6-di-tert-butyl-4methylphenoxy) aluminum.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 35 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
ΑN
     1999:795888 CAPLUS
DN
     132:36705
TI
     Elastic films made from \alpha-olefin/vinyl aromatic and/or aliphatic or
     cycloaliphatic vinyl or vinylidene interpolymers
     Cheung, Yunwa W.; Guest, Martin J.; Van Volkenburgh, William R.
IN
     The Dow Chemical Company, USA
PΑ
so
     PCT Int. Appl., 75 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                         APPLICATION NO.
                                                                 DATE
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19991216 WO 1999-US11430
PΤ
    WO 9964501
                        A1
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19990524 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 9941999 19991230 AU 1999-41999 19990524 A 1 EP 1999-925781 EP 1086168 **A1** 20010328 19990524 B1 20050119 EP 1086168 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2002517584 T2 20020618 JP 2000-553502 19990524 E A1 P AT 1999-925781 AT 287425 20050215 19990524 US 2002136916 20020926 US 2002-57176 20020125 PRAI US 1998-88974P 19980611 US 1999-317390 A1 19990524 WO 1999-US11430 W 19990524

The present invention pertains to elastic films having at least one layer AB comprising; (A) at least one substantially random interpolymer, which comprises; (1) polymer units derived from; (i) at least one vinyl aromatic monomer, or (ii) at least one aliphatic or cycloaliph. vinyl or vinylidene monomer, or (iii) a combination of at least one aromatic vinyl monomer and at least one aliphatic or cycloaliph. vinyl or vinylidene monomer, and (2) polymer units derived from ethylene or at least one C3-20 α -olefin, or combination thereof; and optionally (3) polymer units derived from one or more ethylenically unsatd. polymerizable monomers other than those of (1) and (2); or (B) a blend of Component A with at least one polymer other than that of Component A; and wherein said elastic film has a recovery in the cross direction of greater than or equal to 80 percent and has a recovery in the machine direction of greater than or equal to 60 percent. The present invention also pertains to a multilayer film comprising at least two layers wherein at least one of said layers has a recovery in the

cross direction of greater than or equal to 80 percent and has a recovery in the machine direction of greater than or equal to 60 percent and comprises a polymer composition which comprises; (A) at least one substantially random interpolymer, which comprise; (1) polymer units derived from; (i) at least one vinyl aromatic monomer, or (ii) at least one aliphatic or cycloaliph. vinyl or vinylidene monomer, or (iii) a combination of at least one aromatic vinyl monomer and at least one aliphatic or cycloaliph. vinyl or vinylidene monomer, and (2) polymer units derived from ethylene or at least one C3-20 α -olefin, or combinations thereof; and optionally, (3) polymer units derived from one or more ethylenically unsatd. polymerizable monomers other than those of (1) and (2); or (B) at least one polymer other than that of Component A. An ethylene-styrene copolymer was prepared using metallocene catalysts.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 36 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
     1999:795887 CAPLUS
     132:36704
DN
     Films having dead-fold properties made from \alpha-olefin/vinyl aromatic
TI
     and/or aliphatic or cycloaliphatic vinyl or vinylidene interpolymers
    Cheung, Yunwa W.; Guest, Martin J.; Van Volkenburgh, William R.
IN
PA
     The Dow Chemical Company, USA
SO
     PCT Int. Appl., 70 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
                                                                  DATE
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                               _____
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    WO 9964500
                               19991216
                                          WO 1999-US11429
                                                                 19990524
PΙ
                         A1
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9941998
                               19991230
                                         AU 1999-41998
                                                                  19990524
                         A1
                               20010328
                                          EP 1999-925780
     EP 1086167
                         A1
                                                                  19990524
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
     JP 2002517583
                         T2
                               20020618
                                           JP 2000-553501
                                                                  19990524
PRAI US 1998-88904P
                         P
                               19980611
    WO 1999-US11429
                        W
                               19990524
     The present invention pertains to a film or sheet or extruded profile
     having at least one layer comprising; (A) at least one substantially
    random interpolymer, which comprises; (1) polymer units derived from; (i)
     at least one vinyl aromatic monomer, or (ii) at least one aliphatic or
     cycloaliph. vinyl or vinylidene monomer, or (iii) a combination of at
     least one aromatic vinyl monomer and at least one aliphatic or cycloaliph. vinyl
     or vinylidene monomer, and (2) polymer units derived from at least one
     C2-20 \alpha-olefin; and optionally (3) polymer units derived from one or
     more ethylenically unsatd. polymerizable monomers other than those of (1)
     and (2); or (B) a blend of component A with at least one polymer other
     than that of component A; and wherein the film or sheet or extruded
    profile has a force relaxation in the cross direction or machine direction
    or both of greater than or equal to 40 percent. The present invention
     also pertains to a multilayer film or sheet or extruded profile comprising
     at least two layers wherein at least one of the layers is a film or sheet
    or extruded profile having a force relaxation in the cross direction or
    machine direction or both of greater than or equal to 40 percent,
    comprising; (A) at least one substantially random interpolymer, which
    comprises; (1) polymer units derived from; (i) at least one vinyl aromatic
    monomer, or (ii) at least one aliphatic or cycloaliph. vinyl or vinylidene
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monomer, or (iii) a combination of at least one aromatic vinyl monomer and at

least one aliphatic or cycloaliph. vinyl or vinylidene monomer, and (2)

polymer units derived from at least one C2-20 α -olefin; and (3) polymer units derived from one or more ethylenically unsatd. polymerizable monomers other than those of (1) and (2); or (B) a blend of Component A with at least one polymer other than that of Component A. An ethylene-styrene copolymer was prepared using metallocene catalysts.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 37 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1999:761046 CAPLUS

DN 132:3943

TI Enlarged cell foams from blends of alkenyl aromatic polymers and α -olefin/vinyl or vinylidene interpolymers

IN Chaudhary, Bharat I.; Hood, Lawrence S.; Barry, Russell P.; Park, Chung P.

PA The Dow Chemical Company, USA

SO U.S., 16 pp.

CODEN: USXXAM

DT Patent

LA English

FAN. CNT 1

ran.		TENT				KIN		DATE		(APPL	ICAT	ION I				ATE	
PI	US	5993						1999	1130		US 1	998-	2060:				9981	204
	US	6355	341			B1		2002	0312	1	US 1	999-	3870	14		19	9990	831
	CA	2353	093			AA		2000	0615		CA 1	999-	2353	093		1.9	9991	116
	WO	2000	0343	65		A2		2000	0615	1	WO 1	999-1	US27	178		19	9991	116
	WO	2000	0343	65		A3		2000	0914									
			ΑE,					•		BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
																		is,
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			MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,
								US,										
				RU,				·	·	•	•	•	•	•	•	•	•	•
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		•						GR,										
								GW,										
	EP	1135	431			A2		2001	0926		EP 1	999-	9680	43		19	9991	116
•		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
								RO				_	-		-		•	-
	TR	2001	0227	5		T2		2001	1221	•	rr 2	001-	2001	0227	5	19	9991:	116
	TR 200102275 JP 2002531658					T2		2002	0924	,	JP 2	000-	5868	06		19	9991:	116
	NO	2001	0026	002693 A				2001	0723]	NO 2	001-2	2693			-20	010	531
•	US	2002	1552	70		A1		2002	1024	1	JS 2	002-	5169	5		20	0020	118
PRAI	US	1998	-206	028		A3		1998	1204									
	US	1999	-387	014		A3		1999	0831									
	WO	1999	-US2	7178		W		1999	1116									

AB This invention pertains to a composition and a process for preparing a closed cell alkenyl aromatic polymer foam having enlarged cell size, comprising one or more alkenyl aromatic polymers, one or more substantially random interpolymers, one or more blowing agents having zero ozone depletion potential and optionally one or more co-blowing agents, and (or) nucleating agents and additives. This combination allows the manufacture of closed cell, low d. alkenyl aromatic polymer foams of enlarged cell size, when blowing agents of relatively high nucleation potential are employed. When such blowing agents are used with alkenyl aromatic polymers in the absence of the substantially random interpolymers, small cell foams result.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 38 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1999:705030 CAPLUS

DN 131:323718

TI Process for preparing thermoset elastomeric interpolymers and foams

IN McKay, Kevin W.; Timmers, Francis J.; Feig, Edwin R.; Ho, Thoi H.; Karande, Seema V.

PA The Dow Chemical Company, USA

SO U.S., 27 pp., Cont.-in-part of U.S. 761,049, abandoned. CODEN: USXXAM

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DT
        Patent
        English
 FAN.CNT 5
                                KIND DATE APPLICATION NO.
                                                                                               DATE
        PATENT NO.
PI US 5977271 A 19991102 US 1997-921642 19970827
US 6111020 A 20000829 US 1998-116192 19980715
CA 2300062 AA 19990304 CA 1998-2300062 19980826
TR 200000515 T2 20001121 TR 2000-200000515 19980826
BR 9814448 A 20011106 BR 1998-14448 19980826
CN 1098287 B 20030108 CN 1998-810339 19980826
CN 1098287 B 20030108 CN 1998-810339 19980826
NO 200000963 A 20000426 NO 2000-963 20000225
PRAI US 1994-300300 B3 19940902
US 1996-761049 B2 19961205
US 1996-761050 B2 19961205
US 1997-921641 A2 19970827
US 1997-921642 A2 19970827
WO 1998-US17673 W 19980826

AB The subject invention provides a thermoset elastomer comprising a
                                                           _____
        The subject invention provides a thermoset elastomer comprising a
 AB
        crosslinked pseudorandom or substantially random interpolymer of: (a) at
        least one \alpha-olefin, (b) at least one vinylidene aromatic compound, and
        (c) optionally at least one diene, the polymer being prepared in the
        presence of a constrained geometry catalyst. The subject invention
        further provides a thermoplastic vulcanizate comprising the thermoset
        elastomers of the invention as provided in a thermoplastic polyolefin
        matrix. The subject invention further provides processes for preparing the
        inventive thermoset elastomers and thermoplastic vulcanizates, as well as
        parts fabricated therefrom. The inventive materials have a superior
        balance of properties, as compared to EPM and EPDM based materials.
        subject invention also pertains to foams and methods for their preparation
                    THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE.CNT 19
                    ALL CITATIONS AVAILABLE IN THE RE FORMAT
 T.4
        ANSWER 39 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
 AN
        1999:614016 CAPLUS
 DN
        131:229866
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Open-cell polystyrene foams from interpolymer blends

The Dow Chemical Company, USA

Park, Chung P.; Imeokparia, Daniel D.; Chaudhary, Bharat I.

TI

IN

PA

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so
      PCT Int. Appl., 65 pp.
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 1
                       KIND DATE APPLICATION NO.
      PATENT NO.
      WO 9947592 A1 19990923 WO 1999-US5706 19990315
PΤ
           W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
               DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
               KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
               MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
               TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
           RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
               ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
               CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      CA 2324277
                             AA 19990923 CA 1999-2324277
                                                                              19990315
      AU 9930919
                             A1
                                    19991011
                                                  AU 1999-30919
                                                                             19990315
      AU 747560
                            B2
                                    20020516
                    A 20000725 US 1999-268585 19990315
A 20001114 BR 1999-8944 19990315
A1 20010117 EP 1999-912571 19990315
      US 6093752
      BR 9908944
      EP 1068260
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, FI
TR 200002668 T2 20010221 TR 2000-200002668

JP 2002506903 T2 20020305 JP 2000-536781

TW 457265 B 20011001 TW 1999-88104081

US 6174471 B1 20010116 US 2000-553306

NO 2000004632 A 20001108 NO 2000-4632

PRAI US 1998-78091P P 19980316

US 1999-268585 A3 19990315
                                                                             19990315
                                                                              19990315
                                                                             19990601
                                                                            20000420
                                                                              20000915
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WO 1999-US5706 W 19990315

AB The title foam is formed from a blend of polystyrene and an ethylene-styrene interpolymer. The ethylene-styrene interpolymer functions as a cell opening agent, and is used to control the open cell content of the resulting foam, which may contain >80 percent open cells. The foam is produced by an extrusion process in which CO2 is used as the preferred blowing agent. The resulting foams may be formed into beads, sheets, etc.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:595456 CAPLUS

DN 131:229983

TI Fibers and bicomponent fibers made from α -olefin/vinyl or vinylidene aromatic and/or hindered cycloaliphatic or aliphatic vinyl or vinylidene interpolymers and fabric articles

IN Turley, Robert R.; Stewart, Kenneth B.

PA The Dow Chemical Company, USA

SO PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT N	ю.	KIN	ID DATE	APPLICATION NO.	DATE
PI	WO 99464	35	A	. 19990916	WO 1999-US5285	19990310
	W:	AL, AM,	AT, AU,	AZ, BA, BB,	BG, BR, BY, CA, CH,	CN, CU, CZ, DE,
		DK, EE,	ES, FI,	GB, GE, GH,	GM, HR, HU, ID, IL,	IN, IS, JP, KE,
		KG, KP,	KR, KZ,	LC, LK, LR,	LS, LT, LU, LV, MD,	MG, MK, MN, MW,
		MX, NO,	NZ, PL,	PT, RO, RU,	SD, SE, SG, SI, SK,	SL, TJ, TM, TR,
		TT, UA,	UG, US,	UZ, VN, YU,	ZW, AM, AZ, BY, KG,	KZ, MD, RU, TJ, TM
	RW:	GH, GM,	KE, LS,	MW, SD, SL,	SZ, UG, ZW, AT, BE,	CH, CY, DE, DK,
		ES, FI,	FR, GB,	GR, IE, IT,	LU, MC, NL, PT, SE,	BF, BJ, CF, CG,
					NE, SN, TD, TG	•
	CA 23225	69	A.	19990916	CA 1999-2322569	19990310
	AU 99299	79	A1	19990927	AU 1999-29979	19990310
				20021212		
	ZA 99019	34	Α	20000910	ZA 1999-1934	19990310
	EP 10683	77	A	. 20010117	EP 1999-911304	19990310
	R:	AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
		IE, FI				
					US 1999-265793	19990310
	BR 99088				BR 1999-8804	19990310
	JP 20025	06145	T	20020226	JP 2000-535790	19990310
	TW 53815	51	В	20030621		
	NO 20000	04500	A	20001031		20000908
	NO 31476	59	B	. 20030519		
PRAI	US 1998-			19980311		
	WO 1999-	US5285	W	19990310		

AB Fibers comprise (A) 50-100% (based on A and B) of ≥1 substantially random interpolymer having an melt index 0.1-1000 g/10 min, d. >0.9300 g/cm3, and mol. weight distribution 1.5-20; which comprises (1) 0.5-65 mol% units derived from (i) ≥1 vinyl or vinylidene aromatic monomer, or (ii) ≥1 hindered aliphatic or cycloaliph. vinyl or vinylidene monomer, or (iii) a combination of (i) and (ii), and (2) 35-99.5 mol% units derived from ethylene or ≥1 C3-20 α-olefin or a combination; and (B) 0-50% of ≥1 tackifier. The fibers could have applications such as carpet fibers, elastic fibers, doll hair, personal/feminine hygiene applications, diapers, athletic sportswear, wrinkle free and form-fitting apparel, conductive fibers, upholstery, and medical applications including, but not restricted to, bandages, gamma sterilizable nonwoven fibers.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:595279 CAPLUS

DN 131:215192

```
Fabricated articles having shape memory made from blends of
ΤI
    \alpha-olefin/vinyl or vinylidene aromatic and/or hindered aliphatic
     vinyl or vinylidene interpolymers
    Hoenig, Steve M.; Turley, Robert R.; Cheung, Yunwa W.; Guest, Martin J.;
IN
     Diehl, Charles F.; Stewart, Kenneth B.; Sneddon, John
PA
    The Dow Chemical Company, USA
    PCT Int. Appl., 121 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                      KIND DATE
                                        APPLICATION NO.
                             19990916 WO 1999-US5276
                                                               -----
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                                                               19990310
    WO 9946327
                        A1
PΙ
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
            KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
            MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
            TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                        CA 1999-2322571
     CA 2322571
                         AΑ
                               19990916
                                                                 19990310
    AU 9930779
                         A1
                               19990927
                                          AU 1999-30779
                                                                19990310
                               20000910
                                          ZA 1999-1938
                                                                19990310
     ZA 9901938
                         Α
                                        US 1999-265794
EP 1999-912396
                               20001205
                                                                19990310
    US 6156842
                         Α
                              20001227
    EP 1062273
                        A1
                                                                19990310
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                               20011218
                                          BR 1999-8806
    BR 9908806
                         Α
                                                                 19990310
                        T2 20020226
                                          JP 2000-535700
    JP 2002506105
                                                                 19990310
                                          TW 1999-88103670
    TW 479063
                       В
                             20020311
                                                                 19990702
    NO 2000004499
                       Α
                              20001108
                                          NO 2000-4499
                                                                 20000908
                              19980311
PRAI US 1998-77633P
                       P
                       W
                              19990310
    WO 1999-US5276
     Shape/reshape behavior is observed for compns. comprising (A) 1-100% (based
AB
    on A and B) of ≥1 substantially random interpolymer having an melt
     index (I2) 0.1-1000 g/10 min and an mol. weight distribution, Mw/Mn, 1.5-20,
    of (1) 38-65 mol% units derived from (a) ≥1 vinyl or vinylidene
     aromatic monomer, or (b) ≥1 hindered aliphatic or cycloaliph. vinyl or
    vinylidene monomer, or (c) combination of (a) and (b), and (2) 35-62 mol%
     units derived from ethylene and/or \geq 1 C3-20 \alpha-olefin; and (B)
     0-99% ≥1 polymer other than component A, (C) 0-50% ≥1
     tackifier, and (D) 0-80% ≥1 filler. Thus, ethylene-styrene
     interpolymer was processable into moldings and fibers with good shape
    memory.
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 7
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
   . ANSWER 42 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
     1999:549276 CAPLUS
DN
     131:185377
    Catalyst activators comprising expanded anions for olefin polymerization
ΤI
IN
    Lapointe, Robert E.
PA
    The Dow Chemical Company, USA
SO
     PCT Int. Appl., 56 pp.
     CODEN: PIXXD2
DT
     Patent
    English
T.A
FAN.CNT 2
    PATENT NO.
                       KIND
                              DATE
                                         APPLICATION NO.
                                                                DATE
                       ____
                                          -----
                              -----
                             19990826 WO 1999-US3413
    WO 9942467
                        A1
                                                                19990217
PΙ
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
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TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

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RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2317774
                           AA
                                 19990826
                                              CA 1999-2317774
                                                                      19990217
     AU 9932980
                           A1
                                 19990906
                                              AU 1999-32980
                                                                      19990217
     AU 749065
                           B2
                                 20020620
     BR 9908336
                           Α
                                 20001010
                                              BR 1999-8336
                                                                      19990217
     EP 1056752
                           A1
                                 20001206
                                              EP 1999-934283
                                                                      19990217
     EP 1056752
                           B1
                                 20030625
         R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, FI
                          T2
                                 20010122
                                              TR 2000-200002404
                                                                      19990217
     TR 200002404
     JP 2002504485
                          T2
                                 20020212
                                              JP 2000-532419
                                                                     19990217
     AT 243700
                          E
                                 20030715
                                              AT 1999-934283
                                                                      19990217
     CN 1120168
                           В
                                 20030903
                                              CN 1999-802921
                                                                      19990217
                          T3
                                 20031216
                                              ES 1999-934283
     ES 2196835
                                                                      19990217
                                 20000821
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     ZA 9901355
                          Α
                                                                      19990219
     US 6716786
                          B1
                                 20040406
                                              US 2000-631654
                                                                      20000803
     NO 2000004135
                                 20001018
                                             NO 2000-4135
                          Α
                                                                      20000818
                          A1
                                 20011004
                                             US 2001-823650
     US 2001027161
                                                                     20010402
                          B2
                                 20020528
     US 6395671
     US 2002132729
                          A1
                                 20020919
                                             US 2002-97395
                                                                      20020313
     US 6462156
                          B2
                                 20021008
PRAI US 1998-75329P
                          Р
                                 19980220
                          B1
     US 1999-251664
                                 19990217
     WO 1999-US3413
                          W
                                 19990217
                          Р
     US 1999-156242P
                                 19990927
     US 2001-823650
                          A3
                                 20010402
AB
     A compound useful as a catalyst activator has formula (A*+a)b(Z*J*j)-cd,
     where A^* = cation of charge +a, Z^* = anion group of 1-50 atoms not
     counting H atoms, further containing ≥2 Lewis base sites; J* = Lewis
     acid coordinated to ≥1 Lewis base site of Z*, and optionally
     ≥2 J* groups may be joined together in a group having multiple
     Lewis acid functionality, j = 2-12 and a, b, c, and d = 1-3, with the proviso that a x b is c x d. Thus, ethylene and 1-octene were polymerized at
     140° for 1 h in the presence of 1 part (t-
     butylamido)dimethyl(tetramethylcyclopentadienyl)silanetitanium (IV) di-Me
     catalyst and 1 part dioctadecylmethylammonium
     bis(tris(pentafluorophenyl)borane)imidazolide cocatalyst.
RE.CNT
              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 43 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
L4
ΑN
     1999:405031 CAPLUS
DN
     131:45581
     Seals from alpha-olefin/vinylidene aromatic and/or hindered aliphatic
     vinylidene interpolymers
     Markovich, Ronald P.; Cheung, Yunwa W.; Guest, Martin J.; Gathers, John
```

- TΤ
- IN J.; De Lassus, Phillip T.
- PA The Dow Chemical Company, USA
- SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DTPatent

LAEnglish

FAN.CNT 1

_			_																	
		PATI	ENT 1	NO.			KIN)	DATE		7	APPL	ICAT:	ION I	NO.		D	ATE		
								-									-			
I	ΡI	WO S	9931	176			A1		1999	0624	1	WO 1	998-1	US26	795		19	9981	216	
			W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
				DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	
			KG, KP, 1 MX, NO, 1			KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
			MX, NO,			NZ,	ΡL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
		TT, UA,		ŪĠ,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM		
			RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	
				FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
				CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
		ZAS	9811	512			A	:	2000	0615		ZA 1	998~:	11512	2		19	9812	215	
		TW 432094				В		2001	0501	7	rw 19	998-	8712	0869		19	99812	215		
		CA 2	23149	994			AA		1999	0624	(CA 19	998-2	23149	994		19	9812	216	
		AU S	99208	871			A1		1999	0705	7	AU 19	999-2	2087	1		19	9812	216	

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EP 1998-965396
                                                                  19981216
                               20001004
     EP 1040161
                         A1
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, FI
                                         BR 1998-12798
                                                                  19981216
     BR 9812798
                 A
                               20001017
                         T2
                                           JP 2000-539087
                                                                  19981216
     JP 2002508423
                               20020319
     NO 2000003072
                         Α
                               20000810
                                           NO 2000-3072
                                                                  20000615
PRAI US 1997-991836
                        A2
                               19971216
                       · W
     WO 1998-US26795
                               19981216
     The title seals including container closure liners, gaskets, and barrier
     membranes, comprise a polymer composition having an O transmission coefficient of
     .ltorsim.300 cm3.mil/100 in2.day.atmospheric (1.2 cm3/cm.day.MPa) at 25°;
     the polymer composition comprises at least one substantially random
     interpolymer (or a blend comprising at least one substantially random
     interpolymer and at least one other polymer) and ≤80% (based on the
     total weight of the composition) of at least one filler. A typical composition
     contains an ethylene-styrene copolymer blended with atactic polystyrene
     (prepared using (tert-butylamido)dimethyl(tetramethyl-η5-
     cyclopentadienyl)silanetitanium di-Me metallocene catalyst).
     systems from the interpolymers, e.g., bottle caps, exhibit low O
     permeability, low Shore A hardness, and excellent tensile strain recovery.
RE.CNT 4
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
    ANSWER 44 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
ΑN
     1999:325988 CAPLUS
DΝ
     130:353080
ΤI
    Aqueous dispersions or emulsions of interpolymers of alpha-olefin/hindered
     aromatic vinylidene and use in coatings
IN
    Oates, John D.; Czerepinski, Ralph G.; Hoenig, Wendy D.; Kernstock, John
    M.; Walther, Brian W.; Bethea, James R.
PA
     The Dow Chemical Company, USA
SO
     PCT Int. Appl., 45 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                       KIND DATE
                                         APPLICATION NO.
                                          _____
                              19990520 WO 1998-US24171
ΡI
    WO 9924492
                         A1
                                                                 19981112
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    CA 2309821
                         AA
                              19990520
                                         CA 1998-2309821
                                                                 19981112
                                         AU 1999-13220
EP 1998-959429
    AU 9915228
                         A1
                               19990531
                                                                  19981112
    EP 1030874
                         A1
                               20000830
                                                                 19981112
        R: BE, CH, DE, ES, FR, GB, IT, LI, NL, FI
                  A
                                          BR 1998-14179
    BR 9814179
                             20000926
                                                                 19981112
    JP 2001522911
                         T2
                               20011120
                                           JP 2000-520497
                                                                 19981112
PRAI US 1997-65390P
                         P
                               19971112
    WO 1998-US24171
                         W
                               19981112
os i
    MARPAT 130:353080
    Film-forming, aqueous dispersions comprise ≥1 substantially random
AB
     interpolymer of (A) units derived from (1) ≥1 vinylidene aromatic
    monomer, or (2) ≥1 hindered aliphatic or cycloaliph. vinylidene
    monomer, or (3) a combination of ≥1 aromatic vinylidene monomer and
    ≥1 hindered aliphatic or cycloaliph. vinylidene monomer, and (4)
    \geq1 C2-20 \alpha-olefin; and (B) a surfactant. The aqueous dispersions
    or emulsions are useful as barrier paper coatings, corrosion resistance
    coatings, carpet backing and carpet fiber binders, in some instances,
    precursors for high mol. weight polymers, composites and membranes for separation
    systems, coatings and binders for paints, inks, moisture barriers in
    packaging, fabric coatings, synthetic gloves, adhesives, foams, composite
    flooring tiles and layers, sound deadening composite foams and pads,
    automotive protective exterior coatings, and removable temporary
    protective coatings. Thus, ethylene and styrene were polymerized in the
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presence of dimethyl [N-(1,1-dimethylethyl)-1,1-dimethyl-1-[(1,2,3,4,5- η)-1,5,6,7-tetrahydro-3-phenyl-s-indacen-1-yl]silanaminato(2-)-N] titanium and tris(pentafluorophenyl)borane. Ethylene-styrene copolymer latex showed excellent phys. properties and resistance to corrosives.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 45 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:286026 CAPLUS

DN 130:312602

Compositions of interpolymers of α -olefin monomers with one or more vinyl or vinylidene aromatic monomers

IN Babinec, Susan J.; Blanchard, Mechelle A.; Guest, Martin J.; Walther, Brian W.; Chaudhary, Bharat I.; Barry, Russell P.

PA The Dow Chemical Company, USA

SO PCT Int. Appl., 103 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

11111	PAT	CENT :	NO.					DATE				LICAT		NO.		D	ATE	
ΡI	WO	9920	 685			A1		1999	 0429			 1998-		699		1	 9981	015
		W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR	, BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR	, HU,	ID,	IL,	IS,	JP,	KE,	KG,
			KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LÜ	, LV,	MD,	MG,	MK,	MN,	MW,	MX,
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG	, SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
			UA,	ŪĠ,	US,	UΖ,	VN,	ΥU,	ZW,	AM,	ΑZ	, BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW	, AT,	BE,	CH,	CY,	DE,	DK,	ES,
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL	, PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
			CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD	, TG						
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			ΙE,	FI														
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	JP	2001	5202	91		T2		2001	1030		JP :	2000-	5170	14		1:	9981	015
	US	6380	294			B1		2002	0430	•	US :	1998-	1733	81		1:	9981	015
	ZA	9809	464			Α		2000	0417			1998-					9981	016
	NO	2000	0018	65		Α		2000	0614	:	NO :	2000-	1865			2	0000	411
	MX	2000	0376	3		Α		2000	1020		MX :	2000-	3763			2	0000	417
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PRAI	US	1997		P		1997	1017											
	US	1998	-173	381		Al		1998	1015									
	WO	1998	-US2	1699		W		1998	1015									

AB A blend of polymeric materials comprises: (A) from 1 to 99.99 weight percent based on the combined wts. of Components A, B and C of at least one substantially random interpolymer; and wherein the interpolymer: (1) contains from 0.5 to 65 mol percent of polymer units derived from: (a) at least one vinyl or vinylidene aromatic monomer, or (b) at least one hindered aliphatic or cycloaliph. vinyl or vinylidene monomer, or (c) a combination of at least one vinyl or vinylidene aromatic monomer and at least one hindered aliphatic or cycloaliph. vinyl or vinylidene monomer; (2) contains from 35 to 99.5 mol percent of polymer units derived from at least one aliphatic α -olefin having from 2 to 20 carbon atoms; (3) has a mol. weight (Mn) greater than 1,000; (4) has a melt index (I2) from 0.01 to 1,000; (5) has a mol. weight distribution (Mw/Mn) from 1.5 to 20; and (B) from 99 to 0.01 weight percent based on the combined wts. of Components A, B, and C of one or more conductive additives and/or one or more additives with high magnetic permeability; and (C) from 0 to 98.99 weight percent based on the combined wts. of Components A, B, and C of one or more polymers other than A. polymers are typically prepared using metallocene catalysts.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 46 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:271420 CAPLUS

DN 130:297435

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TI Thermoplastic blends of copolymers of \alpha-olefins with at least 1 vinyl or vinylidene aromatic compound and(or) at least 1 hindered aliphatic or cycloaliphatic vinyl or vinylidene compounds with vinyl halide homo- or copolymers
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IN Cheung, Yunwa W.; Guest, Martin J.

PA The Dow Chemical Company, USA

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                      KIND
                              DATE
                                       APPLICATION NO.
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                             -----
                             19990422 WO 1998-US21843
PΙ
    WO 9919398
                       A1
                                                             19981015
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    US 6136923
                       Α
                           20001024
                                       US 1997-950983
                                                              19971015
    ZA 9809380
                       Α
                              20000404
                                        ZA 1998-9380
                                                             19981014
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                             19990422
                                        CA 1998-2304679
                                                             19981015
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                                       AU 1999-10922
                                                              19981015
                       A1
                             19990503
    TR 200000968
                            20000721 TR 2000-200000968 19981015
20000802 EP 1998-953586 19981015
                       T2
    EP 1023385
                       A1
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            IE, FI
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                              20000815 BR 1998-13046
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PRAI US 1997-950983
                            19971015
    WO 1998-US21843
                             19981015
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The present invention relates to blend compns. comprising: (A) of from 1 to 99 weight percent based on the combined wts. of Components A, B and C of at least one substantially random interpolymer; and wherein said interpolymer: (1) contains of from 0.5 to 65 mol percent of polymer units derived from: (a) at least one vinyl or vinylidene aromatic monomer, or (b) at least one hindered aliphatic vinyl or vinylidene monomer, or (c) a combination of at least one vinyl or vinylidene aromatic monomer and at least one hindered aliphatic vinyl or vinylidene monomer; (2) contains of from 35 to 99.5 mol percent of polymer units derived from at least one aliphatic α -olefin having from 2 to 20 carbon atoms; (3) has a mol. weight (Mn) greater than 1,000; (4) has a melt index (I2) of from 0.01 to 1,000; (5). has a mol. weight distribution (Mw/Mn) of from 1.5 to 20; and (6) are prepared with metallocene or constrained geometry catalysts; and (B) of from 99 to 1 weight percent based on the combined wts. of Components A, B and C of one or more vinyl halide homopolymer(s) or copolymer(s); and (C) of from 0 to 70 weight percent based on the combined wts. of Components A, B and C of one or more plasticizers. The novel blend compns. provide materials with improved processing/property attributes over the unmodified polymers comprising the blends. The blend compns. exhibit a unique balance of properties including enhanced modulus and barrier properties, improved tensile strength, radio frequency (rf) sealability, solvent bondability, thermal stability and heat resistance depending upon the selection of the individual blend components and their composition ratios. Addnl., the location and the breadth of the glass transition can be controlled by varying the blend compns. and plasticizer level. Surprisingly blends including a plasticizer show a single phase material from glass transition temperature data anal.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:166657 CAPLUS

DN 130:210682

TI Crosslinked random interpolymer compositions, thermosetting interpolymers,

thermoplastic and thermosetting vulcanizates, foams thereof and articles therefrom McKay, Kevin W.; Timmers, Francis J.; Feig, Edwin R.; Ho, Thoi H.; IN Karande, Seema V. The Dow Chemical Company, USA PA PCT Int. Appl., 106 pp. SO CODEN: PIXXD2 DTPatent English LA FAN.CNT 5 APPLICATION NO. PATENT NO. KIND DATE DATE ----------WO 9910395 19990304 WO 1998-US17673 19980826 PΙ A1 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,

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            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          US 1997-921641
    US 5869591
                              19990209
                                                                  19970827
                         Α
    CA 2300062
                         AA
                               19990304
                                           CA 1998-2300062
                                                                 19980826
                               19990316 AU 1998-89209
20000614 EP 1998-941063
    AU 9889209
                         A1
                                           AU 1998-89209
                                                                  19980826
    EP 1007577
                                                                  19980826
                         A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                                           JP 2000-507718
                         T2
                               20010911
                                                                  19980826
     JP 2001514275
    BR 9814448
                                           BR 1998-14448
                                                                  19980826
                         Α
                               20011106
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                                          NO 2000-963
                                                                  20000225
    NO 2000000963
                               20000426
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B1
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PRAI US 1997-921641
                               19970827
    US 1997-941642
                               19970827
    US 1994-300300
                              19940902
    US 1996-761050
                               19961205
    US 1997-921642
                        Α
                               19970827
    WO 1998-US17673
                         W
                               19980826
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A thermoset elastomer comprises a crosslinked pseudorandom or AB substantially random interpolymer of (a) 15-70 weight% of ≥1 α -olefin, (b) 30-70 weight% of \geq 1 vinylidene aromatic compound, and (c) 0-15 weight% of ≥1 diene. The invention also provides a thermoplastic vulcanizate of the thermoset elastomers in a thermoplastic polyolefin matrix and processes for preparing the thermoset elastomers and thermoplastic vulcanizates, as well as foams and fabricated parts. The materials have a superior balance of properties, as compared to EPM- and EPDM-based materials. Thus, a 48.0:52:0 pseudorandom linear ethylene-styrene interpolymer (I) was prepared using (tertbutylamido)dimethyl-(tetramethyl-n5-cyclopentadienyl)silane dimethyltitanium(IV) and tris(pentafluorophenyl)borane as catalysts, having tensile at break 1390 psi, 100% modulus 256 psi, elongation at break 518%, and melt index at 190° 10.2 g/10 min. The I was compounded with a typical rubber curing composition giving green tensile at break 594 psi, 100% modulus 315 psi, and elongation at break 453%, compared with 70, 52, and 84, resp., for Vistalon 457 (51.0:49.0 ethylene-propene rubber). The crosslinked I showed tensile at break 1005 psi, 100% modulus 532 psi, and elongation at break 297%, compared with

1236, 276, and 409, resp., for the Vistalon 457.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 48 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 1999:109404 CAPLUS
- DN 130:169360
- TI Thermoset interpolymers of olefin and vinylidene aromatic compounds, their blends to make thermoplastic vulcanizate, and their use in fabricated parts and foams
- IN McKay, Kevin W.; Timmers, Francis J.; Feig, Edwin R.; Ho, Thoi H.; Karande, Seema V.
- PA The Dow Chemical Company, USA
- SO U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 761,050, abandoned.

CODEN: USXXAM DT Patent LA English FAN.CNT 5 KIND DATE APPLICATION NO. PATENT NO. DATE _____ ---------_____ ΡI US 5869591 Α 19990209 US 1997-921641 19970827 US 6111020 20000829 US 1998-116192 Α 19980715 AA 19990304 A1 19990304 CA 2300062 AACA 1998-2300062 19980826 WO 9910395 WO 1998-US17673 19980826 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 9889209 A1 19990316 AU 1998-89209 19980826 ZA 1996-,,, EP 1998-941063 ZA 9807755 20000228 Α 19980826 EP 1007577 **A1** 20000614 19980826 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, TR 200000515 T2 20001121 TR 2000-200000515 19980826 JP 2001514275 T220010911 JP 2000-507718 19980826 BR 9814448 20011106 Α BR 1998-14448 19980826 CN 1098287 В 20030108 CN 1998-810339 19980826 A B1 B2 B2 A2 NO 2000000963 20000426 NO 2000-963 20000225 PRAI US 1994-300300 19940902 US 1996-761050 19961205 US 1996-761049 19961205 US 1997-921641 19970827 US 1997-921642 A2 19970827 US 1997-941642 Α 19970827 19980826 WO 1998-US17673 W A thermoset elastomer comprises a crosslinked pseudorandom or AB substantially random interpolymer of (a) ≥ 1 α -olefin 15-70, (b) ≥1 vinylidene aromatic compound 30-70, and (c) ≥1 diene The thermoplastic vulcanizate comprises the thermoset elastomers in a thermoplastic polyolefin matrix. THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 21 ALL CITATIONS AVAILABLE IN THE RE FORMAT L4ANSWER 49 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN AN 1998:723813 CAPLUS DN130:4186 TI Random ethylene/alpha-olefin/diene interpolymers and their preparation and indenyl ligand-metallocene catalyst systems therefor IN Mangold, Debra J.; Vanderlende, Daniel D.; Kale, Lawrence T.; Parikh, Deepak R. PA The Dow Chemical Co., USA; Dupont Dow Elastomers L.L.C. SO PCT Int. Appl., 63 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 APPLICATION NO. PATENT NO. KIND DATE DATE --------------WO 9849212 WO 1997-US7252 PΙ A1 19981105 19970430 W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,

ML, MR, NE, SN, TD, TG

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19981105

19981124

20000301

CA 1997-2287963

AU 1997-28196

EP 1997-922557

19970430

19970430

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CA 2287963

AU 9728196

EP 981556

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R: AT, BE, DE, DK, ES, FR; GB, IT, NL
                                           CN 1997-182141
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     CN 1254350
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                         Α
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     JP 2001522398
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     MX 9909023
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                               20000731
                                                                  19991001
PRAI WO 1997-US7252
                               19970430
     MARPAT 130:4186
OS
     Random ethylene-\alpha-olefin-diene interpolymers with an \alpha-olefin
AΒ
     distribution that is more clustered than Bernoullian are prepared using a
     group 4 metal constrained geometry complex catalyst and an activating
     cocatalyst. The catalyst includes a fused-ring indenyl derivative ligand.
     Thus, a 44.3:7.5:48.2 ethylene-5-ethylidene-2-norbornene-propene copolymer
     (I, Mw 132,500, MWD 1.98) was prepared at 90.7° using
     (tert-butylamido) dimethyl (η5-2-methyl-s-indacen-1-
     yl)silanetitanium(IV) di-Me (II) (preparation given) and
     tris(pentafluorophenyl)borane with catalyst efficiency 2.16 million lb/lb
     Ti, compared with catalyst efficiency 0.87 for a 44.1:4.5:51.4 I (Mw
     51,300, MWD 1.85) prepared using (tetramethylcyclopentadienyl)dimethyl(tert-
     butylamido) silanetitanium 1,3-pentadiene instead of II.
              THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 9
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
T.4
     ANSWER 50 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1998:723812 CAPLUS
DN
     130:14329
     Olefin polymers prepared with substituted indenyl containing metal
TI
     complexes
     Kale, Lawrence T.; Vanderlende, Daniel D.; Nickias, Peter N.; Patton,
IN
     Jasson T.; Stevens, James C.; Parikh, Deepak R.; Mangold, Debra J.
PA
     The Dow Chemical Co., USA
     PCT Int. Appl., 136 pp.
SO
     CODEN: PIXXD2
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     Patent
     English
LA
FAN.CNT 3
                        KIND
     PATENT NO.
                               DATE
                                          APPLICATION NO.
                                                                 DATE
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                               19981105 WO 1998-US8859
                         A1
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ΡI
     WO 9849211
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
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             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
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    NO 9905294
                                           NO 1999-5294
                               19991229
                                                                  19991029
    MX 9910059
                                           MX 1999-10059
                               20000331
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PRAI US 1997-45348P
                               19970501
    US 1997-45410P
                               19970501
    WO 1998-US8859
                         W
                               19980501
os
    MARPAT 130:14329
AΒ
     The subject invention is directed to an olefin polymer produced by polymerizing
    at least one \alpha-olefin in the presence of a Group 4 metal complex
     comprising an indenyl group substituted in the 2 or 3 position with at
     least one group selected from hydrocarbyl, perfluoro-substituted
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hydrocarbyl, silyl, germyl and mixts. thereof, said indenyl group further

being covalently bonded to the metal by means of a divalent ligand group, wherein the divalent ligand comprises nitrogen or phosphorus having an aliphatic or alicyclic hydrocarbyl group covalently bonded thereto via a primary or secondary carbon. Preferred olefin polymers of the invention will be characterized as having a high mol. weight, narrow mol. weight distribution, high vinyl content, and a bimodal DSC melting curve or a deconvoluted anal.-temperature-rising-elution-fractionation or GPC curve which shows at least two distinct narrow peaks. A typical catalyst was manufactured by reaction of dimethylsilyl(2,3,4-tetramethylindenyl) chloride with isopropylamine in THF, reaction of the intermediate with BuLi in hexane, reaction of the 2nd intermediate with TiCl3 in THF, and reaction of the 3rd intermediate with MeMgCl in Et2O-THF mixture

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 51 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1998:708873 CAPLUS

DN 129:331536

TI Compositions of olefin copolymers containing slip and antiblock agents for clear (laminate) films or sheets

IN Mergenhagen, Laura K.; Simmons, Brian E.; Wevers, Ronald; Fehr, Bernard;
Van Volkenburgh, William R.

PA The Dow Chemical Co., USA; Van Volkenburgh, William R.

PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

SO

	PA											LICAT					ATE	
PI		9846	672			A2		1998 1999	1022			1998-1					9980	415
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	ZA	9803	157			Α		1999	1015		ZA :	1998-	3157			1:	9980	415
	ΕP	9756	95			A2		2000	0202		EP :	1998-:	9156	01		1	9980	415
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PRAI		1997						1997	0416									
		1997						1997										
	WO	1998	-US7	650		W		1998	0415									
00		י שאבור																

OS MARPAT 129:331536

AB Resin compns. (for films for packaging sealants) comprise a homogeneous ethylene/α-olefin interpolymer; and a saturated fatty acid amide or saturated ethylenebis(amide), unsatd. fatty acid amide or unsatd. ethylenebis(amide), and a finely divided inorg. compound The compns. comprise a substantially random interpolymer of ≥1 α-olefins with ≥1 vinylidene aromatic monomers and/or ≥1 hindered aliphatic or cycloaliph. vinylidene monomers or blends, slip agents, addnl., ≥1 modifying agent of propylene homopolymers, propylene copolymers, nucleating agents, and mixts. Thus, a blend of Affinity PL 1880 (d. 0.9110 g/cm3; metallocene catalyzed), 1500 ppm erucamide, 250 ppm stearamide, 2500 ppm SiO2 was formed into a blown film (2 mil thickness) having blocking (good <49 g) 45.4 g and coefficient of friction (good <0.31) 0.25.

L4 ANSWER 52 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

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Fused ring substituted indenyl metal complexes and polymerization process
ΤI
     Mcadon, Mark H.; Nickias, Peter N.; Patton, Jasson T.; Shankar, Ravi B.;
IN
     Timmers, Francis J.; Vanderlende, Daniel D.; Kolthammer, Brian W. S.;
     Ueligger, Steven M.
PA
     Dow Chemical Co., USA
SO
     PCT Int. Appl., 68 pp.
     CODEN: PIXXD2
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     Patent
     English
FAN.CNT 3
                                            APPLICATION NO.
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129:122972

AB Group 4 metal constrained geometry complexes in combination with an activating cocatalyst are highly efficient in the polymerization of olefins over a wide range of polymerization conditions and especially at elevated temps. Thus, dimethyl [N-(1,1-dimethylethyl)-1,1-dimethyl-[(1,2,3,4,5-η)-1,5,6,7-tetrahydro-2-methyl-3-phenyl-s-indacen-1-yl]silanaminato(2-)-N]titanium having the structure I and the cocatalyst tris(pentafluorophenyl)borane as 0.005 M solns. in toluene were mixed to give a molar ratio of 1:1. A reactor was charged with 360 g Isopar E mixed alkanes solvent and 460 g styrene and hydrogen was added as a mol. weight control agent. After heating the mixture to 90°, ethylene, at 200 psig., and the catalyst solution were added, and polymerization conditions were maintained for 30 min. The catalyst efficiency was 102 kg polymer/g Ti.

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L4 ANSWER 53 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1998:175973 CAPLUS

DN 128:217984

TI Blends of interpolymers of α -olefins, aromatic vinylidene monomers, and/or hindered aliphatic or cycloaliphatic vinylidene monomers

IN Guest, Martin J.; Cheung, Yunwa W.; Gathers, John J.; Chum, Pak-Wing S.

PA Dow Chemical Company, USA; Guest, Martin J.; Cheung, Yunwa W.; Gathers, John J.; Chum, Pak-Wing S.

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

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		9236				A1					EP :	1997-	9397	91		1.9	9970	904
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AB A blend of polymeric material is characterized by comprising a plurality of interpolymers, each resulting from polymerizing (1) 0.5-65 mol% of either (a) at least one aromatic vinylidene monomer or (b) at least one hindered aliphatic or cycloaliph. vinylidene monomer, or (c) a combination of at least one vinylidene aromatic monomer and at least one hindered aliphatic vinylidene monomer, (2) 35-99 mol* of at least one C2-20 aliphatic α -olefin, and (3) 0-10 mol% of other olefin monomers. wherein interpolymer components differ in that (i) the amount of vinylidene aromatic monomer residue and/or hindered aliphatic or cycloaliph. vinylidene monomer residue in any interpolymer component differs from another by at least 0.5 mol percent; and/or (ii) there is a difference of at least 20 percent between the number average mol. weight (Mn) of interpolymer components. The interpolymer components differ in that (i) the amount of vinylidene aromatic monomer residue and/or hindered aliphatic or cycloaliph. vinylidene monomer residue in any interpolymer component differs from another by ≥0.5 mol%; and/or (ii) there is a difference of ≥20% between the number average mol. weight (Mn) of interpolymer components. These blends of interpolymer components give enhanced properties or processability when compared to the individual polymers comprising the blend.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 54 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:175955 CAPLUS

DN 128:217746.

TI Alpha-olefin/vinylidene aromatic monomer and/or hindered aliphatic or cycloaliphatic vinylidene monomer interpolymers with increased modulus IN Campbell, Richard E., Jr.; McAdon, Mark H.; Nickias, Peter N.; Patton,

Jasson T.; Redwine, Oscar D.; Timmers, Francis J. Dow Chemical Company, USA; Campbell, Richard E., Jr.; McAdon, Mark H.; PA Nickias, Peter N.; Patton, Jasson T.; Redwine, Oscar D.; Timmers, Francis PCT Int. Appl., 30 pp. SO CODEN: PIXXD2 DT Patent English LA FAN.CNT 1 APPLICATION NO. KIND DATE -------------------WO 9809999 A2 19980312 WO 1997-US15559 19970904 PΙ WO 9809999 A3 19980430 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG ZA 1997-7907 ZA 9707907 19990303 19970903 Α TW 473503 В 20020121 TW 1997-86112679 19970903 AA CA 1997-2264894 CA 2264894 19980312 19970904 AU 9741810 · A1 AU 1997-41810 19980326 19970904 A2 EP 1997-939797 EP 923612 19990623 19970904 EP 923612 20030416 В1 R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, FI Α CN 1997-198572 CN 1232476 19991020 19970904 CN 1096475 В 20021218 T2 20010109
A 20020102
E 20030515
T3 20040101
B1 20010220
A2 19960904
W 19970904 JP 2001500180 JP 1998-512885 19970904 BR 9711675 BR 1997-11675 19970904 AT 237649 AT 1997-939797 19970904 ES 2197362 US 6191245 ES 1997-939797 19970904 19990302 US 1999-254251 PRAI US 1996-708869 W WO 1997-US15559 19970904 OS MARPAT 128:217746 The title polymers comprise $\alpha\text{-olefin/vinylidene}$ aromatic monomer and/or AΒ hindered (cyclo)aliphatic vinylidene monomers containing ≥1 tetrad sequences consisting of α -olefin/vinylidene aromatic monomer or hindered (cyclo)aliphatic monomer/vinylidene aromatic monomer or hindered (cyclo) aliphatic vinylidene monomer/ α -olefin insertions detectable by 13C-NMR spectroscopy, wherein the monomer insertion of the tetrads occur exclusively in a 1,2 (head-to-tail) manner. In particular, ethylene/styrene copolymers have peaks in the 13C-NMR spectra in the chemical shift range 43.70-44.25 ppm, preferably 43.75-44.25 ppm and 38.0-38.5 ppm, said peaks being at least three times the peak to peak noise. The interpolymers are prepared by polymerizing the appropriate mixture of monomers in the presence of a catalyst such as rac-[dimethylsilanediyl(2-methyl-4phenylindenyl)]zirconium dichloride. ANSWER 55 OF 55 CAPLUS COPYRIGHT 2005 ACS on STN L41998:126260 CAPLUS AN128:167818 DN Heteroatom-substituted cyclopentadienyl-containing metal complexes, their TI preparation and use for olefin polymerization IN Klosin, Jerzy; Kruper, William J., Jr.; Nickias, Peter N.; Patton, Jasson T.; Wilson, David R. PA Dow Chemical Company, USA PCT Int. Appl., 217 pp. SO CODEN: PIXXD2 DT Patent LΑ English FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE --------------WO 9806727 19980219 WO 1997-US13170 ΡI A1 19970728

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     MARPAT 128:167818
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ABThe metal complexes contain a heteroatom-Cp bond or a ring heteroatom-Cp bond in the 3-position of the Cp. In preferred metal complexes the ligand is a 3-heteroatom substituted indenyl group. These catalyst systems for olefin polymerization may be used at high temps., are highly active and produce high mol. weight polymer. C2H4 and 1-octene were polymerized at 140° in mixed alkane in the presence of B(C6F5)3 and catalyst (N-(1,1dimethylethyl)-1,1-dimethyl-1((1,2,3,3a,7a-n)-3-(1-pyrrolidinyl)-1Hinden-1-yl)silanaminato(2-)-N)dimethyltitanium (preparation given).

RE.CNT THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD 5 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	492	(556/11).CCLS.	US-PGPUB; USPAT; EPO; JPO	ÖR	OFF	2005/11/07 13:50
L2	482	(556/19).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/11/07 14:49
L3 .	520	(556/12).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/11/07 15:16
L4	443	(556/21).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/11/07 16:22
L5	316	(556/22).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/11/07 16:41
L6	2290	(526/160).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/11/07 17:27
L7	1889	(502/103).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/11/07 18:01
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